
CIRCULATION CIRCULATION

An Official Journal of the American Heart Association

VOLUME XLIX
January-June, 1974



AMERICAN HEART ASSOCIATION, INC.

CIRCULATION

AN OFFICIAL JOURNAL OF THE AMERICAN HEART ASSOCIATION

EDITOR-IN-CHIEF

EUGENE A. STEAD, JR., *Durham, N. C.*

ASSOCIATE EDITORS

VICTOR S. BEHAR, *Durham, N. C.*

PATRICK A. MCKEE, *Durham, N. C.*

M. PAUL CAPP, *Tucson, Ariz.*

HAROLD C. STRAUSS, *Durham, N. C.*

ASSISTANT EDITORS

PATRICIA K. HODGSON, *Durham, N. C.*

LOU ANN BROWER, *Durham, N. C.*

EDITORIAL BOARD

FRANCOIS M. ABBOUD, *Iowa City, Iowa*

J. A. ABILDSKOV, *Salt Lake City, Utah*

W. GERALD AUSTEN, *Boston, Mass.*

JOHN S. BANAS, JR., *Boston, Mass.*

WILLIAM A. BAXLEY, *Birmingham, Ala.*

J. THOMAS BIGGER, JR., *New York, N. Y.*

NORMAN BRACHFELD, *New York, N. Y.*

EUGENE BRAUNWALD, *Boston, Mass.*

DANIEL A. BRODY, *Memphis, Tenn.*

PAUL J. CANNON, *New York, N. Y.*

LAWRENCE S. COHEN, *New Haven, Conn.*

JAY N. COHN, *Washington, D. C.*

LOYAL LEE CONRAD, *Tulsa, Okla.*

ERNEST CRAIGE, *Chapel Hill, N. C.*

PAUL F. CRANEFIELD, *New York, N. Y.*

J. MICHAEL CRILEY, *Torrance, Calif.*

HARRIET P. DUSTAN, *Cleveland, Ohio*

EDWARD M. DWYER, JR., *New York, N. Y.*

MARY ALLEN ENGLE, *New York, N. Y.*

STEPHEN E. EPSTEIN, *Bethesda, Md.*

ALVAN R. FEINSTEIN, *New Haven, Conn.*

M. IRENÉ FERRER, *New York, N. Y.*

ALFRED P. FISHMAN, *Philadelphia, Pa.*

NOBLE O. FOWLER, *Cincinnati, Ohio*

DONALD S. FREDRICKSON, *Bethesda, Md.*

WILLIAM F. FRIEDMAN, *San Diego, Calif.*

GOTTLIEB C. FRIESINGER, *Nashville, Tenn.*

BRUCE N. GOLDRAYER, *San Pedro, Calif.*

RICHARD GORLIN, *Boston, Mass.*

JOSEPH C. GREENFIELD, *Durham, N. C.*

RICHARD S. GUBNER, *Safety Harbor, Fla.*

JACOB I. HAFT, *Bronx, N. Y.*

WILLIAM P. HOOD, JR., *Birmingham, Ala.*

HERBERT N. HULTGREN, *Palo Alto, Calif.*

J. O'NEAL HUMPHRIES, *Baltimore, Md.*

THOMAS N. JAMES, *Birmingham, Ala.*

WILLIAM B. KANNEL, *Framingham, Mass.*

SAMUEL KAPLAN, *Cincinnati, Ohio*

JAMES J. LEONARD, *Pittsburgh, Pa.*

HERBERT J. LEVINE, *Boston, Mass.*

ROBERT I. LEVY, *Bethesda, Md.*

BERNARD LOWN, *Boston, Mass.*

WILLIAM J. MANDEL, *Los Angeles, Calif.*

DEAN T. MASON, *Davis, Calif.*

DWIGHT C. MCGOON, *Rochester, Minn.*

HENRY D. MCINTOSH, *Houston, Texas*

ANDREW G. MORROW, *Bethesda, Md.*

J. FRASER MUSTARD, *Hamilton, Ont. Can.*

ROBERT J. MYERBURG, *Miami, Fla.*

ALAN S. NIES, *Nashville, Tenn.*

JOSEPH K. PERLOFF, *Philadelphia, Pa.*

RICHARD L. POPP, *Stanford, Calif.*

CHARLES E. RACKLEY, *Birmingham, Ala.*

WILLIAM C. ROBERTS, *Bethesda, Md.*

JOHN ROSS, JR., *La Jolla, Calif.*

DAVID C. SABISTON, JR., *Durham, N. C.*

PHILIP SAMET, *Miami Beach, Fla.*

ARTHUR A. SASAHARA, *West Roxbury, Mass.*

BURTON E. SOBEL, *St. Louis, Mo.*

MADISON S. SPACH, *Durham, N. C.*

C. FRANK STARMER, *Durham, N. C.*

RICHARD VAN PRAAGH, *Boston, Mass.*

GALEN S. WAGNER, *Durham, N. C.*

ALBERT L. WALDO, *Birmingham, Ala.*

ANDREW G. WALLACE, *Durham, N. C.*

ARNOLD M. WEISSLER, *Detroit, Mich.*

LOUIS G. WELT, *New Haven, Conn.*

ROBERT E. WHALEN, *Durham, N. C.*

IRVING S. WRIGHT, *New York, N. Y.*

PAUL N. YU, *Rochester, N. Y.*

DOUGLAS P. ZIPES, *Indianapolis, Ind.*

CONSULTING EDITORS: HERRMAN L. BLUMGART, *Boston, Mass.*; HOWARD B. BURCHELL, *Minneapolis, Minn.*;

EPHRAIM DONOSO, *New York, N. Y.*

PUBLICATIONS COMMITTEE, AMERICAN HEART ASSOCIATION

STANFORD WESSLER, *Chairman*

St. Louis, Mo.

William A. Bayless
New York, N. Y.

Robert M. Berne
Charlottesville, Va.

Arthur Guyton
Jackson, Miss.

Donald C. Harrison
Stanford, Calif.

William K. Hass
New York, N. Y.

Thomas N. James
Birmingham, Ala.

Thomas Killip
New York, N. Y.

Herbert J. Levine
Boston, Mass.

Clark H. Millikan
Rochester, Minn.

Lucille E. Notter
New York, N. Y.

Milton C. Paige, Jr.
Boston, Mass.

Oglesby Paul
Chicago, Ill.

Richard L. Popp
Stanford, Calif.

Elliot Rapaport
San Francisco, Calif.

Eugene A. Stead, Jr.
Durham, N. C.

Arnold M. Weissler
Detroit, Mich.

CIRCULATION

VOLUME XLIX

January-June, 1974

No. 1 (January)

EDITORIALS:

- Coronary Thrombosis and Fatal Myocardial Ischemia.** William C. Roberts 1
The Fourth Heart Sound—A Premature Requiem? Morton E. Tavel 4

ORIGINAL ARTICLES:

- The Initial Attack of Acute Rheumatic Fever During Childhood in North India. A Prospective Study of the Clinical Profile.** Shyamal K. Sanyal, Mohinder K. Thapar, Syed H. Ahmed, Vijaya Hooja and Promila Tewari 7
Chagasic Cardiopathy: Demonstration of a Serum Gamma Globulin Factor Which Reacts with Endocardium and Vascular Structures. Patricio M. Cossio, Carlos Diez, Ana Szarfman, Eduardo Kreutzer, Bartolomé Candiolo and Roberto M. Arana 13
Patterns of Ventriculo-Atrial Conduction in the Wolff-Parkinson-White Syndrome. Hein J. Wellens and Dirk Durrer 22
The Effects of Cycle Length on Cardiac Refractory Periods in Man. Pablo Denes, Delon Wu, Ramesh Dhingra, Raymond J. Pietras and Kenneth M. Rosen 32
A Balloon Tipped Catheter for Obtaining His Bundle Electrograms Without Fluoroscopy. Steven G. Meister, Vidya S. Banka, Kul D. Chadda and Richard H. Helfant 42
Left Ventricular Function and Coronary Artery Anatomy Before and After Myocardial Infarction: A Study of Six Cases. Douglas K. Stewart, Glen W. Hamilton, John A. Murray and J. Ward Kennedy 47
Differentiation of Physiologically Significant Coronary Artery Lesions by Coronary Blood Flow Measurements During Isoproterenol Infusion. Lawrence D. Horwitz, George C. Curry, Robert W. Parkey and Frederick J. Bonte 55
Gas Endarterectomy of Right Coronary Artery: The Importance of Proximal Bypass Graft. Jack H. Klie, Lewis Johnson, Harold Smulyan, James L. Potts, Anis I. Obeid, C. Thomas Fruehan, Robert H. Eich, Frederick B. Parker and Watts R. Webb 63
Left Main Coronary Artery Stenosis: Results of Coronary Bypass Surgery. Howard J. Zeft, Jack C. Manley, John H. Huston, Alfred J. Tector, James E. Auer and W. Dudley Johnson 68
The Long-Term Follow-Up of Patients Undergoing Saphenous Vein Bypass Surgery. David S. Cannom, D. Craig Miller, Norman E. Shumway, Thomas J. Fogarty, Pat O. Daily, Marie Hu and Donald C. Harrison 77
Role of the Vagus Nerves in the Cardiovascular Changes Induced by Coronary Occlusion. Peter B. Corr and Richard A. Gillis 86
Plasma Volume Prior to and Following Volume Loading During Shock Complicating Acute Myocardial Infarction. Protasio L. daLuz, Max Harry Weil, Vinnie Y. Liu and Herbert Shubin 98
Hemodynamic Effects of Plasma Volume Expansion and Prognostic Implications in Acute Myocardial Infarction. H. Leon Greene, David T. Kelly, Dean R. Taylor and Bertram Pitt 106
Lung Water in Patients with Acute Myocardial Infarction. Theodore L. Biddle, Purshottam K. Khanna, Paul N. Yu, Morrison Hodges and Pravin M. Shah 115
Acute Effects of Ethanol on Left Ventricular Performance. Lawrence D. Horwitz and James M. Atkins 124
Wall Thickness and Diastolic Properties of the Left Ventricle. William Grossman, Lambert P. McLaurin, Sally P. Moos, Miltiadis A. Stefadourous and Daniel T. Young 129
Left Ventricular Volume Changes After Amyl Nitrite and Nitroglycerin in Man as Measured by Ultrasound. Gary W. Burggraf and John O. Parker 136
Selection of Patients with Truncus Arteriosus for Surgical Correction: Anatomic and Hemodynamic Considerations. Douglas D. Mair, Donald G. Ritter, George D. Davis, Robert B. Wallace, Gordon K. Danielson and Dwight C. McGoon 144
Experimental Pulmonary Embolism: Effect on Pulmonary Blood Volume and Vascular Compliance. Joseph S. Alpert, Florence W. Haynes, James E. Dalen and Lewis Dexter 152
Incorporation of Radiolabelled Fibrinogen into Venous Thrombi Induced in Dogs. Thomas C. Kravis, Elaine M. Shibel, John D. Brooks and Kenneth M. Moser 158

(Continued)

Analysis and Correction of Pressure Wave Distortion in Fluid-Filled Catheter Systems. Herman L. Falsetti, Robert E. Mates, Robyn J. Carroll, Ramji L. Gupta and Adam C. Bell	165
CLINICOPATHOLOGIC CORRELATIONS:	
Conditions Simulating the Tetralogy of Fallot. B. N. Satyanarayana Rao and Jesse E. Edwards	173
RADIOLOGY:	
The Complementary Roles of Chest Radiography, Lung Scanning, and Selective Pulmonary Angiography in the Diagnosis of Pulmonary Embolism. David C. Moses, Terry M. Silver and Joseph J. Bookstein	179
BOOK REVIEWS	189
BOOKS RECEIVED	192
LETTERS TO THE EDITOR:	
Relation of Electrolyte Disturbances to Cardiac Arrhythmias. Brian Ehrlich, Hadi Dizadji; Charles Fisch	193
Tricuspid Valve in Ebstein's Anomaly. Morris N. Kotler; Nils-Rune Lundström	194
Effects of Exercise on LVET. Rex MacAlpin; David H. Spodick, Veronica M. Quarry-Pigott	195
Unstable Angina Pectoris and Coronary Bypass Surgery. A. B. Shaffer; Peter C. Gazes	196
A-V Nodal Wenckebach Cycles and Reentry. Abraham I. Shaffer, Nicholas P. DePasquale; Anthony N. Damato	197
NEWS FROM THE AMERICAN HEART ASSOCIATION	Page 1

No. 2 (February)

AN APPRECIATION OF PAUL DUDLEY WHITE, 1886-1973:

"I'm Not Through Yet." J. Willis Hurst	199
James B. Herrick Award Acceptance. Allan Friedlich	203
Memorial Service Remarks. Vittorio Puddu	205

ORIGINAL ARTICLES:

Surgical Correction of Anomalous Left Ventricular Pre-Excitation: Wolff-Parkinson-White (Type A). Andrew G. Wallace, Will C. Sealy, John J. Gallagher, Robert H. Svenson, Harold C. Strauss, and Jack Kasell	206
Late Postoperative Conduction Disturbances After Repair of Ventricular Septal Defect and Tetralogy of Fallot—Analysis of His Bundle Recordings. M. J. Godman, N. K. Roberts, and T. Izukawa	214
Permanent Pervenous Atrial Pacing from the Coronary Vein: Long-Term Follow-Up. Arthur J. Moss, Robert J. Rivers, Jr., and David H. Kramer	222
Echocardiographic Findings in Discrete Subvalvular Aortic Stenosis. Richard L. Popp, James F. Silverman, James W. French, Edward B. Stinson, and Donald C. Harrison	226
Echocardiographic Assessment of Left Ventricular Performance in Normal Newborns. David J. Sahn, William J. Deely, Arthur D. Hagan, and William F. Friedman	232
Echocardiographic Studies of Stented Fascia Lata Grafts in the Mitral Position. David A. S. Mary, Brojesh C. Pakrashi, Roger W. Catchpole, and Marian I. Ionescu	237
Reduction in the Rate of Diastolic Descent of the Mitral Valve Echogram in Patients with Altered Left Ventricular Diastolic Pressure-Volume Relations. Miguel A. Quinones, William H. Gaasch, Efrain Waisser, and James K. Alexander	246
Changes in Diastolic Stiffness and Tone of the Left Ventricle During Angina Pectoris. William H. Barry, Jeff Z. Brooker, Edwin L. Alderman, and Donald C. Harrison	255
The Comparative Antiarrhythmic Actions of Lidocaine and Its Quaternary Derivative, Methyl Lidocaine. Frank J. Kniffen, Timothy E. Lomas, Nancy L. Nobel-Allen, and Benedict R. Lucchesi	264
Antiarrhythmic Properties of Chlordiazepoxide. Richard A. Gillis, Harold Thibodeaux, and Louis Barr	272
Myocardial Balance of Inorganic Phosphate and Enzymes in Man: Effects of Tachycardia and Ischemia. Miguel A. Chiong, Roxroy West, and John O. Parker	283
Reduction in Severity and Extent of Myocardial Infarction When Nitroglycerin and Methoxamine Are Administered During Coronary Occlusion. John W. Hirshfield, Jr., Jeffrey S. Borer, Robert E. Goldstein, Michael J. Barrett, and Stephen E. Epstein	291
Intraoperative Coronary Collateral Function in Patients with Coronary Occlusive Disease: Nitroglycerin Responsiveness and Angiographic Correlations. Robert E. Goldstein, Edward B. Stinson, James L. Scherer, Ronald P. Seningen, Todd M. Grehl, and Stephen E. Epstein	298
Reproduction of Maximal Exercise Performance in Patients with Angina Pectoris Despite Ouabain Treatment. Manfred Niederberger, Robert A. Bruce, Richard Frederick, Fusako Kusumi, and Arthur Marriott	309
Sound Pressure Correlates of the Second Heart Sound: An Intracardiac Sound Study. James A. Shaver, Richard A. Nadolny, James D. O'Toole, Mark E. Thompson, P. S. Reddy, Donald F. Leon, and Edward I. Curtiss	316
Left Ventricular Subendocardial Ischemia in Severe Valvar and Supravalvar Aortic Stenosis: A Common Mechanism. William R. Vincent, Gerald D. Buckberg, and Julien I. E. Hoffman	326

(Continued)

Results of Elective Aortocoronary Saphenous Vein Graft Surgery in a Community Hospital. Alan D. Forker, Herbert E. Reese, Walt F. Weaver, Charles S. Wilson, Robert Buchman, and Stephen W. Carveth	334
Simultaneous Measurement of Total and Nutritional Coronary Blood Flow in Dogs. Adrian D. LeBlanc, Richard C. Riley, and Ralph G. Robinson	338
Graded Exercise Stress Tests in Angiographically Documented Coronary Artery Disease. Alan G. Bartel, Victor S. Behar, Robert H. Peter, Edward S. Orgain, and Yihong Kong	348
Insulin, Free Fatty Acid and Glucose Response to Intravenous Glucagon Following Myocardial Infarction. P. R. Gupta, M. K. Sinha, R. J. Dash, P. L. Wahi, and G. K. Rastogi	357
Acute Rejection in the Long-Term Cardiac Transplant Survivor: Clinical Diagnosis, Treatment and Significance. Anthony F. Graham, Alan K. Rider, Philip K. Caves, Edward B. Stinson, Donald C. Harrison, Norman E. Shumway, and John S. Schroeder	361
CLINICOPATHOLOGIC CORRELATIONS:	
De Subitaneis Mortibus: IV. Coronary Vessels and Conduction System in Homocystinuria. Thomas N. James, Nina A. J. Carson, and Peter Froggatt	367
RADIOLOGY:	
The Natural History of the So-Called Aneurysm of the Membranous Ventricular Septum in Childhood. Robert M. Freedom, Robert D. White, Daniel R. Pieroni, P. Jacob Varghese, L. Jerome Krovetz, and Richard D. Rowe	375
BOOK REVIEWS	385
NEWS FROM THE AMERICAN HEART ASSOCIATION	Page 1
No. 3 (March)	
EDITORIALS:	
Cardiovascular Disease—Guidelines for Prevention and Care Resources. Irving S. Wright	387
Major Changes Made by Criteria Committee of the New York Heart Association	390
BIOAVAILABILITY EDITORIALS:	
Bioavailability of Drugs: Focus on Digoxin. Gerhard Levy and Milo Gibaldi	391
Digoxin—The Regulatory Viewpoint. John G. Harter, Jerome P. Skelly, and Arthur W. Steers	395
What Should the Practicing Physician Know About Digoxin Bioavailability and How Will FDA Action Affect Him? New York Heart Association Task Force on Digitalis Preparations	399
ORIGINAL ARTICLES:	
The Postpericardiotomy Syndrome and Antiheart Antibodies. Mary Allen Engle, John C. McCabe, Paul A. Ebert, and John Zabriskie	401
Transvenous, Transmediastinal and Transthoracic Ventricular Pacing: A Comparison After Complete Two-Year Follow-Up. Alan S. Brenner, Galen S. Wagner, S. T. Anderson, Robert A. Rosati, and James J. Morris	407
Effect of Carbon Monoxide Exposure on Intermittent Claudication. Wilbert S. Aronow, Edward A. Stemmer, and Michael W. Isbell	415
Echocardiographic Features of Endocardial Cushion Defects. Roberta G. Williams and Michael Rudd	418
Paradoxical Motion of Interventricular Septum in Left Bundle Branch Block. Abdul S. Abbasi, Leslie M. Eber, Rex N. MacAlpin, and Albert A. Kattus	423
Echocardiographic Abnormalities in the Mitral Valve Prolapse Syndrome. Richard L. Popp, Owen R. Brown, James F. Silverman, and Donald C. Harrison	428
Echocardiographic and Phonocardiographic Characteristics of the Lillehei-Kaster Mitral Valve Prosthesis. Thomas C. Gibson, Peter J. K. Starek, Sally Moos, and Ernest Craige	434
The A Wave of the Apexcardiogram and Left Ventricular Diastolic Stiffness. Thomas C. Gibson, Robert Madry, William Grossman, Lambert P. McLaurin, and Ernest Craige	441
Electrocardiographic and Cineangiographic Correlations in Assessment of the Location, Nature and Extent of Abnormal Left Ventricular Segmental Contraction in Coronary Artery Disease. Richard R. Miller, Ezra A. Amsterdam, Hugo G. Bogren, Rashid A. Massumi, Robert Zelis, and Dean T. Mason	455
Postinfarction Ventricular Septal Rupture: Surgical Considerations and Results. Emilio R. Giuliani, Gordon K. Danielson, James R. Pluth, Norman A. Odyniec, and Robert B. Wallace	455
The Posthospital Phase of Myocardial Infarction: Identification of Patients with Increased Mortality Risk. Arthur J. Moss, John DeCamilla, Fredrick Engstrom, William Hoffman, Charles Odoroff, and Henry Davis	460
Deterioration of Myocardial Function Following Aorto-Coronary Bypass Operation. Richard L. Shepherd, Samuel B. Itscoitz, D. Luke Glancy, Edward B. Stinson, Robert L. Reis, Gordon N. Olinger, Chester E. Clark, and Stephen E. Epstein	467
Coronary Artery Disease in 116 Kindred with Familial Type II Hyperlipoproteinemia. Neil J. Stone, Robert I. Levy, Donald S. Fredrickson, and Joel Verter	476
Natural History of Ischemic Heart Disease in Relation to Arteriographic Findings: A Twelve Year Study of 224 Patients. J. O'Neal Humphries, Lewis Kuller, Richard S. Ross, Gottlieb C. Friesinger, and E. Eugene Page	489

(Continued)

A Comparison of Transmural and Nontransmural Acute Myocardial Infarction. John E. Madias, Robert A. Chahine, Richard Gorlin, and Daniel J. Blacklow	498
Systemic-Pulmonary Arterial Shunts in the First Year of Life. Nestor J. Truccone, Frederick O. Bowman, Jr., James R. Malm, and Welton M. Gersony	508
Quantitation of Left-to-Right Cardiac Shunts with Radionuclide Angiography. Page A. W. Anderson, Robert H. Jones, and David C. Sabiston	512
The Onset and Magnitude of the Contractile Response to Commonly Used Digitalis Glycosides in Normal Subjects. Wilbur Forester, Richard P. Lewis, Arnold M. Weissler, and Thomas A. Willke	517
Electrophysiologic Effects of Procaine Amide in Patients with Intraventricular Conduction Delay. Melvin M. Scheinman, Alan N. Weiss, Eugene Shafton, Neal Benowitz, and Malcolm Rowland	522
Coronary Ostial Stenosis: A Complication of Aortic Valve Replacement. James D. Yates, Marvin M. Kirsh, Thomas M. Sodeman, Joseph A. Walton, Jr., and James F. Brymer	530
Comparison of Blood Flow Measured by Plethysmograph and Flowmeter During Steady State Forearm Exercise. John Longhurst, Robert J. Capone, Dean T. Mason, and Robert Zelis	535
Pulmonary Diffusing Capacity in Disorders of the Pulmonary Circulation. J. H. Burgess	541
The Metabolic and Hemodynamic Effects of Prolonged Bed Rest in Normal Subjects. Aram V. Chobanian, Robert D. Lille, Ann Tercyak, and Pengwynne Blevins	551
Alterations of Systolic Time Intervals During Pregnancy. John R. Burg, Arthur Dodek, Frank E. Kloster, and James Metcalfe	560
Common (Single) Ventricle with Normally Related Great Vessels. José Marín-García, Rajendra Tandon, James H. Moller, and Jesse E. Edwards	565
CASE REPORTS:	
Corrected Transposition of the Great Arteries: Associated Ventricular Rotation. Robin H. Kinsley, Dwight C. McGoon, and Gordon K. Danielson	574
Catheter-Induced Intra-Hisian and Intrafascicular Block During Recording of His Bundle Electrograms: A Report of Two Cases. Lester B. Jacobson and Melvin Scheinman	579
CLINICOPATHOLOGIC CORRELATIONS:	
A Developmental Complex Including Supraaortic Stenosis of the Aorta and Pulmonary Trunk. Leonard C. Blieden, Russell V. Lucas, Jr., John B. Carter, Kenneth Miller, and Jesse E. Edwards	585
BOOK REVIEWS	
LETTERS TO THE EDITOR:	
Effect of Posture on Exercise Performance. G. DeBacker; David H. Spodick, V. M. Quarry	594
Coronary Heart Disease Prevention. Thomas J. Bassler; Frederick H. Epstein	594
Echocardiography of Mitral Valve Prolapse. Lewis Sasse, Paul Lightfoot; Judy Burgess, Ralph Clark, Keith Cohn	595
Wenckebach Periods and His-Purkinje Damage. Ruben Chuquimia, Kenneth M. Rosen; M. Susana Halpern, Gerardo J. Nau, Raul J. Levi, Marcelo V. Elizari, Mauricio B. Rosenbaum	596
NEWS FROM THE AMERICAN HEART ASSOCIATION	Page 1
AHA Committee Report: Criteria for Evaluation of Automated Blood Pressure Measuring Devices	Page 6
No. 4 (April)	
EDITORIALS:	
Prevention of Complications of Coronary Arteriography. Melvin P. Judkins and Martin P. Gander	599
Heparin Action. Robert D. Rosenberg	603
ORIGINAL ARTICLES:	
The Nature of Treatment Selection in Coronary Artery Disease: Experience with Medical and Surgical Treatment of a Chronic Disease. J. Frederick McNeer, C. Frank Starmer, Alan G. Bartel, Victor S. Behar, Yihong Kong, Robert H. Peter and Robert A. Rosati	606
Pathophysiologic Correlations in Two Cases of Split His Bundle Potentials. Saroja Bharati, Maurice Lev, Delon Wu, Pablo Denes, Ramesh Dhirga and Kenneth M. Rosen	615
Unmasking and Conversion of Gap Phenomenon in the Human Heart. Masood Akhtar, Anthony N. Damato, Antonio R. Caracta, William P. Batsford, Guillermo Vargas and Sun H. Lau	624
Atrioventricular Conduction in Patients with Incomplete Endocardial Cushion Defect. Daniel J. Goodman, Donald C. Harrison and David S. Cannom	631
The Significance of Second Degree Atrioventricular Block and Bundle Branch Block: Observations Regarding Site and Type of Block. Ramesh C. Dhirga, Pablo Denes, Delon Wu, Ruben Chuquimia and Kenneth M. Rosen	638
Further Observations on Ventricular Tachycardia As Studied by Electrical Stimulation of the Heart: Chronic Recurrent Ventricular Tachycardia and Ventricular Tachycardia During Acute Myocardial Infarction. Hein J. J. Wellens, K. I. Lie and Dirk Durrer	647
Rate Dependent Ventricular Ectopia Following Acute Coronary Occlusion: The Concept of An Optimal Antiarrhythmic Heart Rate. Kul D. Chadda, Vidya S. Banka and Richard H. Helfant	654

(Continued)

Antiarrhythmic Drug Therapy for Sporadic Ventricular Ectopic Arrhythmias. Michael V. Jelinek, Leif Lohrbauer and Bernard Lown	659
Maximum Treadmill Exercise Test in Patients with Abnormal Control Electrocardiograms. Joseph W. Linhart and Howard B. Turnoff	667
Echocardiography in Coexisting Hypertrophic Subaortic Stenosis and Fixed Left Ventricular Outflow Obstruction. Kyung J. Chung, James A. Manning and Raymond Gramiak	673
Value of Exploratory "Scanning" in the Echocardiographic Diagnosis of Ruptured Chordae Tendineae. T. D. Giles, G. E. Burch and E. C. Martinez	678
Effects of Nitroglycerin on Left Ventricular Wall Motion in Coronary Artery Disease. James T. Dove, Pravin M. Shah and Bernard F. Schreiner	682
Rest and Exercise Potassium-43 Myocardial Perfusion Imaging for the Noninvasive Evaluation of Aortocoronary Bypass Surgery. Barry L. Zaret, Neil D. Martin, Ronald L. McGowan, H. William Strauss, Harry P. Wells, Jr. and M. D. Flamm, Jr.	688
Cardiovascular Mechanisms of Functional Aerobic Impairment in Patients with Coronary Heart Disease. Robert A. Bruce, Fusako Kusumi, Manfred Niederberger and John L. Petersen	696
Discrepancies Between Cineangiographic and Postmortem Findings in Patients with Coronary Artery Disease and Recent Myocardial Revascularization. Claude M. Grondin, Ihor Dyrda, André Pasternac, Lucien Campeau, Martial G. Bourassa and Jacques Lespérance	703
Right Atrial Volume Measurements from Biplane Cineangiocardiology: Methodology, Normal Values, and Alterations with Pressure or Volume Overload. Thomas P. Graham, Jr., Gerald F. Atwood, Scott L. Faulkner and James H. Nelson	709
The Syndrome of Systolic Click, Murmur and Mitral Valve Prolapse—A Cardiomyopathy? Stephen J. Gulotta, Louis Gulco, Vellore Padmanabhan and Stuart Miller	717
The Rate of Change of Left Ventricular Volume in Man: I. Validation and Peak Systolic Ejection Rate in Health and Disease. K. E. Hammermeister, R. C. Brooks and J. R. Warbasse	729
The Rate of Change of Left Ventricular Volume in Man: II. Diastolic Events in Health and Disease. K. E. Hammermeister and J. R. Warbasse	739
An Analysis of Segmental Ischemic Dysfunction Utilizing the Pressure-Length Loop. John V. Tyberg, James S. Forrester, H. L. Wyatt, Steven J. Goldner, William W. Parmley and H. J. C. Swan	748
Impaired Left Ventricular Function in Alcoholic Cirrhosis with Ascites: Ineffectiveness of Ouabain. Constantinos J. Limas, Nabil H. Guiha, Osoth Lekagul and Jay N. Cohn	755
Taussig-Bing Heart with the Mitral Valve Straddling: Case Reports and Postmortem Study. Nobuo Kitamura, Atsuyoshi Takao, Masahiko Ando, Yasuharu Imai and Soji Konno	761
CASE REPORT:	
Echocardiographic Manifestation of Right Sinus of Valsalva Aneurysm. Donald A. Rothbaum, James C. Dillon, Sonia Chang and Harvey Feigenbaum	768
CLINICOPATHOLOGIC CORRELATIONS:	
De Subitaneis Mortibus. V. Occluded A-V Node Artery. Thomas N. James, Donald B. Hackel and Thomas K. Marshall	772
BOOK REVIEWS	778
LETTERS TO THE EDITOR:	
Echocardiogram of Mitral Valve Prolapse. Daniel J. Goodman; Stephen D. Shappell, Ross E. Brown	780
Journal Reviewers: A Line of Defense for Patients. David H. Spodick	780
NEWS FROM THE AMERICAN HEART ASSOCIATION	Page 1
American Board of Internal Medicine, Certification in the Subspecialty of Cardiovascular Disease July-December 1973	Page 10

No. 5 (May)

EDITORIALS:

Selectivity in Beta-Adrenergic Responses: Clinical Implications. Robert J. Lefkowitz	783
"Variant" Angina Pectoris. David Scherf and Jules Cohen	787

ORIGINAL ARTICLES:

Pathophysiologic Observations in Prehospital Ventricular Fibrillation and Sudden Cardiac Death. Richard R. Libershton, Eugene L. Nagel, Jun C. Hirschman, Sidney R. Nussenfeld, Brian D. Blackburne, and Joseph H. Davis	790
An Electrophysiologic Approach to the Surgical Treatment of the Wolff-Parkinson-White Syndrome: Report of Two Cases Utilizing Catheter Recording and Epicardial Mapping Techniques. Robert H. Svenson, John J. Gallagher, Will C. Sealy, and Andrew G. Wallace	799
Intraventricular Conduction Delay as a Determinant of Atrial Echo Beats. P. Jacob Varghese, Anthony N. Damato, Antonio R. Caracta, John J. Gallagher, Mark E. Josephson, and Sun H. Lau	805
The Gap Phenomena During Retrograde Conduction in Man. Masood Akhtar, Anthony N. Damato, Antonio R. Caracta, William P. Batsford, and Sun H. Lau	811
Relationships Between Increased Automaticity and Depressed Conduction in the Main Intraventricular Conducting Fascicles of the Human and Canine Heart. Mauricio B. Rosenbaum, Marcelo V. Elizari, Pablo Chiale, Raul J. Levi, Gerardo J. Nau, M. Susana Halpern, Julio O. Lazzari, and Alejandro Novakovsky	818

(Continued)

Vectorcardiographic Criteria for the Diagnosis of Inferior Myocardial Infarction. John W. Starr, Galen S. Wagner, Victor S. Behar, Abe Walston II, and Joseph C. Greenfield, Jr.	829
Conduction Disorders in the Canine Proximal His-Purkinje System Following Acute Myocardial Ischemia: The Pathophysiology of Intra-His Block. Nabil El-Sherif, Benjamin J. Scherlag, and Ralph Lazzara	837
Conduction Disorders in the Canine Proximal His-Purkinje System Following Acute Myocardial Ischemia: The Pathophysiology of Bilateral Bundle Branch Block. Nabil El-Sherif, Benjamin J. Scherlag, and Ralph Lazzara	848
Patterns of Ventricular Activity during Catheter Defibrillation. Morton M. Mower, M. Mirowski, Joseph F. Spear, and E. Neil Moore	858
Left Ventricular Hypertrophy Patterns and Prognosis: Experience Postinfarction in the Coronary Drug Project. The Coronary Drug Project Research Group	862
Echocardiographic Recognition of the Congenital Bicuspid Aortic Valve. Navin C. Nanda, Raymond Gramiak, James Manning, Earle B. Mahoney, Elliot O. Lipchik, and James A. DeWeese	870
Echocardiographic Manifestations of Left Bundle Branch Block. James C. Dillon, Sonia Chang, and Harvey Feigenbaum	876
Effect of Propranolol on Oxygen Binding to Hemoglobin In Vitro and In Vivo. Marshall A. Lichtman, Jules Cohen, Marion S. Murphy, Elizabeth A. Kearney, and April A. Whitbeck	881
Effects of Perhexiline on Coronary Hemodynamic and Myocardial Metabolic Responses to Tachycardia. Carl J. Pepine, Steven J. Schang, and Carl R. Bemiller	887
The Electrophysiologic Effects of Lidocaine in Patients with Intraventricular Conduction Defects. F. Kunkel, M. Rowland, and M. M. Scheinman	894
The Short Cardiac Pre-Ejection Period: An Index to Thyrotoxicosis. Alfred F. Parisi, Bruce P. Hamilton, Charles N. Thomas, and Ernest L. Mazzaferri	900
Cardiac Responses to Isometric Exercise: Comparative Effects with Different Postures and Levels of Exertion. Veronica M. Quarry and David H. Spodick	905
Prosthetic Aortic Stenosis: A Method to Prevent Its Occurrence by Measurement of Aortic Size from Pre-operative Aortogram. Ronald P. Seningen, Bernadine H. Bulkley, and William C. Roberts	921
Evaluation of Left Ventricular Performance: Circumferential Fiber Shortening and Tension. George Benzing III, James Stockert, Edwin Nave, and Samuel Kaplan	925
Myocardial Blood Flow and Oxygen Consumption in Man Early After Valve Replacement. James D. Wisheart, Joseph P. Archie, John W. Kirklin, and William G. Tracy	933
Beneficial Effects of Vagal Stimulation and Bradycardia During Experimental Acute Myocardial Ischemia. Richard W. Myers, Alan S. Pearlman, Richard M. Hyman, Richard A. Goldstein, Kenneth M. Kent, Robert E. Goldstein, and Stephen E. Epstein	943
Comparison of the Hemodynamic Effects of Exercise and Isoproterenol Infusion in Patients with Pulmonary Valvar Stenosis. William A. Neal, Russell V. Lucas, Jr., Satyanarayana Rao, and James H. Moller	948
Ascending Aorta to Right Pulmonary Artery Anastomosis: Immediate Results in 123 Patients and One Month to Six Year Follow-up in 74 Patients. Milton J. Reitman, Frank M. Galio, Jr., Galal M. El-Said, Denton A. Cooley, Grady L. Hallman, and Dan G. McNamara	952
Intracardiac Repair in Tetralogy of Fallot: Hemodynamic Studies Following Corrective Surgery. Stanley John, I. P. Sukumar, G. Cherman, R. P. Gupta, S. Krishnaswamy, and George Cherman	958
Severe Congenital Tricuspid Incompetence in the Neonate. Peter A. Barr, John M. Celermajer, J. Denby Bowdler, and Timothy B. Cartmill	962
The Adequacy of Subendocardial Oxygen Delivery: The Interaction of Determinants of Flow, Arterial Oxygen Content and Myocardial Oxygen Need. John Brazier, Norman Cooper, and Gerald Buckberg	968
Evaluation of Subendocardial Ischemia in Valvar Aortic Stenosis in Children. Alan B. Lewis, Michael A. Heymann, Paul Stanger, Julien I. E. Hoffman, and Abraham M. Rudolph	978
Congenital Mitral Valve Disease Associated with Coarctation of the Aorta: A Spectrum that Includes Parachute Deformity of the Mitral Valve. Glenn C. Rosenquist	985
Single Ventricle with Transposition. José Marin-García, Rajendra Tandon, James H. Moller, and Jesse E. Edwards	994
CLINICOPATHOLOGIC CORRELATIONS:	
Atrial Septal Defect in Infancy: Common Association with Other Anomalies. Rajendra Tandon and Jesse E. Edwards	1005
RADIOLOGY:	
Pulmonary Varix: A Diagnostic Pitfall. James E. Davia, Michael S. Golden, Herman L. Price, James E. Hastings, and Melvin D. Cheitlin	1011
BOOK REVIEWS	1013
LETTERS TO THE EDITOR:	
Erratum. Bernard Lown	1015
Treatment of Angina Pectoris. Keith Cohn	1015
Thrombosis and Endothelial Injury. William Dock	1017
Transfemoral Cardiac Pacing and Phlebitis. Stafford I. Cohen, L. Kent Smith, and Jules M. Aroesty	1018
Strip Chart vs Polaroid Echocardiogram. Jonathan G. Greenwald	1018
Atrial Fibrillation and Mitral Stenosis. Nicholas M. Papazoglou	1019
Surgery for WPW Syndrome. Spencer B. King III, R. Bruce Logue	1020
Selecting Patients for Coronary Bypass Grafting. Albert Oberman, Brian J. Maurer, Nicholas T. Kouchoykos, Malcolm E. Turner	1021
Sizing of Figures in Circulation Criticized. Stanley J. Goldberg; Richard L. Popp	1022
NEWS FROM THE AMERICAN HEART ASSOCIATION	
Report of the Inter-Society Commission for Heart Disease Resources: Community Resources for Rehabilitation of Patients with Chronic Obstructive Pulmonary Diseases and Cor Pulmonale	Page 1 A-1
No. 6 (June)	
EDITORIALS:	
On the Critical Lower Level of Cerebral Blood Flow in Man with Particular Reference to Carotid Surgery. Gudrun Boysen, Hans Christian Engell, Giuseppe R. Pistolese, Paolo Fiorani, Alessandro Agnoli and Niels A. Lassen	1023
On Reading Electrocardiograms. Ernest Craigie	1026

(Continued)

ORIGINAL ARTICLES:

Ineffectiveness of Glucose, Potassium, and Insulin Infusion During Pacing Stress in Chronic Ischemic Heart Disease. Michael Lesch, Louis E. Teichholz, J. Stuart Soeldner and Richard Gorlin	1028
Effect of Inotropic Agents on the Localized Dyskinesia of Acutely Ischemic Myocardium: An Experimental Ultrasound Study. Richard E. Kerber, Francois M. Abboud, Melvin L. Marcus and Dwain L. Eckberg	1038
Serum, Atrial, and Urinary Digoxin Levels During Cardiopulmonary Bypass in Children. Richard W. Krasula, Alois R. Hastreiter, Sidney Levitsky, Ruth Yanagi and Lester F. Soyka	1047
Comparison of Serum Digoxin Level Measurement with Acetyl Strophanthidin Tolerance Testing. Michael D. Klein, Bernard Lown, Isaac Barr, Frans Hagemeijer, Henry Garrison and Paul Axelrod	1053
Augmentation of Left Ventricular Contraction Pattern in Coronary Artery Disease by an Inotropic Catecholamine: The Epinephrine Ventriculogram. Howard R. Horn, Louis E. Teichholz, Peter F. Cohn, Michael V. Herman and Richard Gorlin	1063
The Inotropic Effects of the Calcium Ionophore X-537A in the Anesthetized Dog. Norberto T. de Guzman and Berton C. Pressman	1072
Propranolol in the Treatment of Acute Myocardial Infarction: Effect on Myocardial Oxygenation and Hemodynamics. Hiltrud S. Mueller, Stephen M. Ayres, Anna Religa, and Robert G. Evans	1078
Comparison of Isovolumic and Ejection Phase Indices of Myocardial Performance in Man. Kirk L. Peterson, David Skloven, Philip Ludbrook, John B. Uther and John Ross, Jr.	1088
Pre- and Postoperative Rest and Exercise Hemodynamics in Children with Pulmonary Stenosis. Frederic M. Stone, F. Blanton Bessinger, Jr., Russell V. Lucas, Jr. and James H. Moller	1102
The Influence of Heart Rate and Age on the Systolic and Diastolic Time Intervals in Children. S. Spitaels, R. Arbogast, J. C. Fouron and A. Davignon	1107
Biventricular Cineangiography in the Evaluation of Patients with Asymmetric Septal Hypertrophy. David R. Redwood, James L. Scherer and Stephen E. Epstein	1116
Selective Coronary Arteriography in Young Men: A Follow-Up of 449 Patients. Juan S. Lim, William L. Proudfit and F. Mason Sones, Jr.	1122
Necropsy Studies in Myocardial Infarction with Minimal or No Coronary Luminal Reduction Due to Atherosclerosis. R. S. Eliot, G. Baroldi and A. Leone	1127
Antecedents of Cardiovascular Disease in Six Solomon Islands Societies. Lot B. Page, Albert Damon and Robert C. Moellering, Jr.	1132
A Sector Scanner for Real Time Two-Dimensional Echocardiography. James M. Griffith and Walter L. Henry	1147
Echocardiographic Features of Congestive Cardiomyopathy Compared with Normal Subjects and Patients with Coronary Artery Disease. Betty C. Corya, Harvey Feigenbaum, Susan Rasmussen and Mary J. Black	1153
Vital Capacity and Congestive Heart Failure: The Framingham Study. W. B. Kannel, J. M. Seidman, W. Fercho and W. P. Castelli	1160
Thrombotic Calcific Mitral Stenosis: Morphology of the Calcific Mitral Valve. Charles F. Wooley, Nobuhisa Baba, James W. Kilman and Joseph M. Ryan	1167
Coarctation of the Aorta with Congenital Mitral Regurgitation. Michael D. Freed, John F. Keane, Richard Van Praagh, Aldo R. Castañeda, William F. Bernhard and Alexander S. Nadas	1175
The Effect of Isometric Exercise on the Left Ventricular Volume in Normal Man. Miltiadis A. Stefadourous, William Grossman, Mahfouz El Shahawy and A. Calhoun Witham	1185
Coronary Perfusion Versus Cold Ischemic Arrest During Aortic Valve Surgery: A Randomized Study. Ralph N. Sapsford, Eugene H. Blackstone, John W. Kirklin, Robert B. Karp, Nicholas T. Kouchoukos, Albert D. Pacifico, Charles R. Roe and Edwin L. Bradley	1190
Unusual Properties of Accessory Pathways. Douglas P. Zipes, Robert L. DeJoseph and Donald A. Rothbaum	1200
The Missing Waveform Information in the Orthogonal Electrocardiogram (Frank Leads): III. Computer Diagnosis of Angina Pectoris from "Maximal" QRS Surface Waveform Information At Rest. F. Kornreich, P. Block and D. Brismee	1212
The Missing Waveform Information in the Orthogonal Electrocardiogram (Frank Leads): IV. Computer Diagnosis of Biventricular Hypertrophy From "Maximal" Surface Waveform Information. F. Kornreich, P. Block and D. Brismee	1223
Electrophysiological Delineation of the Specialized A-V Conduction System in Patients with Congenital Heart Disease: II. Delineation of the Distal His Bundle and the Right Bundle Branch. Ehud Krongrad, James R. Malm, Frederick O. Bowman, Jr., Brian F. Hoffman and Albert L. Waldo	1232
CLINICOPATHOLOGIC CORRELATIONS:	
De Subitaneis Mortibus. VI. Two Young Soldiers. Thomas N. James, Richard S. Armstrong, Jay Silverman and Thomas K. Marshall	1239
RADIOLOGY:	
The Significance of Coronary Calcification Detected by Fluoroscopy: A Report of 360 Patients. Alan G. Bartel, James T. Chen, Robert H. Peter, Victor S. Behar, Yihong Kong and Richard G. Lester	1247
CASE REPORTS:	
Augmentation of Electrical Alternans with Lowering of the Heart Rate in Massive Pericardial Effusion: A report of a Case. Dennis V. Cokkinos, Constantine Kelesides, John Siaterlis and Evangelos Halimos	1254
Echocardiographic Detection of Supraventricular Aortic Stenosis. Bruce W. Usher, Dudley Goulden and Joseph P. Murgio	1257
BOOK REVIEWS	1260
LETTERS TO THE EDITOR:	
Prognostic Value of ST-Elevation. John E. Madias, William B. Hood, Jr.	1262
Thrombosis and Myocardial Infarction. Earl W. Ferguson	1262
The Fourth Heart Sound. David H. Spodick; Morton E. Tavel	1263
Echocardiography in Normal Newborns. Raymond Gramiak; Arthur D. Hagan, David J. Sahn and William F. Friedman	1266
Exercise Testing in CAD. Robert H. Bilbro; Michael H. Kelemen	1267
Mitral Valve Prolapse. Robert M. Jeresaty; N. Ranganathan, M. D. Silver and E. D. Wigle	1267
Vagal Stimulation and VF. Werner Meesmann, Klaus Stephan	1269
NEWS FROM THE AMERICAN HEART ASSOCIATION	Page 1
VOLUME AUTHOR INDEX	1271
VOLUME SUBJECT INDEX	1275

AMERICAN HEART ASSOCIATION'S

47th Scientific Sessions

Monday, November 18—Thursday, November 21, 1974

Dallas, Texas

• • •

28th Annual Meeting

Council on Arteriosclerosis

American Society for the Study of Arteriosclerosis

November 19—20, 1974

Deadline for Receipt of Abstracts: May 31, 1974

**DR. KENNETH LANE
American Heart Association
44 East 23rd Street
New York, N.Y. 10010**

CIRCULATION

VOLUME XLIX

JANUARY-JUNE, 1974

VOLUME AUTHOR INDEX

NOTE

Some pages are numbered "Page 1" etc. and may be found in the rear advertising section. Intersociety reports, also in the rear advertising section, are numbered "A-300" etc.

- | | | |
|-----------------------------------|-------------------------------|--|
| Abbasi, A. S., 423 | Bookstein, J. J., 179 | Clark, R., 596 |
| Abboud, F. M., 1038 | Borer, J. S., 291 | Cohen, J., 787, 881 |
| Agnoli, A., 1023 | Bourassa, M. G., 703 | Cohen, S. I., 1018 |
| Ahmed, S. H., 7 | Bowdler, J. D., 962 | Cohn, K., 596, 1015 |
| Akhtar, M., 624, 811 | Bowman, F. O., Jr., 508, 1232 | Cohn, J. N., 755 |
| Alderman, E. L., 255 | Boysen, G., 1023 | Cohn, P. F., 1063 |
| Alexander, J. K., 246 | Branscomb, B. V., (May) A-1 | Cokkinos, D. V., 1254 |
| Alpert, J. S., 152 | Brazier, J., 968 | Cooley, D. A., 952 |
| Amsterdam, E. A., 447 | Brenner, A. S., 407 | Cooper, N., 968 |
| Anderson, P. A. W., 512 | Brissee, D., 1212, 1223 | Coronary Drug Project Research Group, The, 862 |
| Anderson, S. T., 407 | Brooker, J. Z., 255 | Corr, P. B., 86 |
| Ando, M., 761 | Brooks, J. D., 158 | Corya, B. C., 1153 |
| Arana, R. M., 13 | Brooks, R. C., 729 | Cossio, P. M., 13 |
| Archie, J. P., 933 | Brown, B., Jr., 77 | Craige, E., 434, 441, 1026 |
| Aroesty, J. M., 1018 | Brown, O. R., 428 | Curry, G. C., 55 |
| Atkins, J. M., 124 | Brown, R. E., 780 | Curtiss, E. I., 316 |
| Atwood, G. F., 709 | Bruce, R. A., 309, 696 | |
| Arbogast, R., 1107 | Brymer, J. F., 530 | Daily, P. O., 77 |
| Armstrong, R. S., 1239 | Buchman, R., 334 | Dalen, J. E., 152 |
| Aronow, W. S., 415 | Buckberg, G. D., 326, 968 | Damato, A. N., 197, 624, 805, 811 |
| Auer, J. E., 68 | Bulkley, B. H., 921 | Damon, A., 1132 |
| Axelrod, P., 1053 | Burch, G. E., 678 | Danielson, G. K., 144, 455, 574 |
| Ayres, S. M., 1078 | Burg, J. R., 560 | Dash, R. J., 357 |
| | Burgess, J., 596 | Davia, J. E., 1011 |
| Baba, N., 1167 | Burgess, J. H., 541 | Davignon, A., 1107 |
| Banka, V. S., 42, 654 | Burggraf, G. W., 136 | Davis, G. D., 144 |
| Baroldi, G., 1127 | Butler, V. P., Jr., 399 | Davis, H., 460 |
| Barr, I., 1053 | | Davis, J. H., 790 |
| Barr, L., 272 | Campeau, L., 703 | DeBacker, G., 594 |
| Barr, P. A., 962 | Candiolo, B., 13 | DeCamilla, J., 460 |
| Barrett, M. J., 291 | Cannom, D. S., 77, 631 | Deely, W. J., 232 |
| Barry, W. H., 255 | Capone, R. J., 535 | de Guzman, N. T., 1072 |
| Bartel, A. G., 348, 606, 1247 | Caracta, A. R., 624, 805, 811 | DeJoseph, R. L., 1200 |
| Bassler, T. J., 594 | Carroll, R. J., 165 | Denes, P., 32, 615, 638 |
| Batsford, W. P., 624, 811 | Carter, J. B., 585 | DePasquale, N. P., 197 |
| Behar, V. S., 348, 606, 829, 1247 | Cartmill, T. B., 962 | Dexter, L., 152 |
| Bell, A. C., 165 | Carson, N. A. J., 367 | DeWeese, J. A., 870 |
| Bemiller, C. R., 887 | Carveth, S. W., 334 | Dhingra, R., 32, 615, 638 |
| Benowitz, N., 522 | Castañeda, A. R., 1175 | Diez, C., 13 |
| Benzing, G., III, 925 | Castelli, W. P., 1160 | Dillon, J. C., 768, 876 |
| Bernhard, W. F., 1175 | Catchpole, R. W., 237 | Dizadij, H., 193 |
| Bessinger, F. B., Jr., 1102 | Caves, P. K., 361 | Dock, W., 1017 |
| Bharati, S., 615 | Celermajer, J. M., 962 | Dodek, A., 560 |
| Biddle, T. L., 115 | Chadda, K. D., 42, 654 | Doyle, E. F., 390 |
| Bilbro, R. H., 1267 | Chahine, R. A., 498 | Dove, J. T., 682 |
| Black, M. J., 1153 | Chang, S., 768, 876 | Durrer, D., 22, 647 |
| Blackbourne, B. D., 790 | Cheitlin, M. D., 1011 | Dyrda, I., 703 |
| Blacklow, D. J., 498 | Chen, J. T., 1247 | |
| Blackstone, E. H., 1190 | Cherian, G., 958 | Eber, L. M., 423 |
| Blevins, P., 551 | Chiale, P., 818 | Ebert, P. A., 401 |
| Bliden, L. C., 585 | Chiong, M. A., 283 | Eckberg, D. L., 1038 |
| Block, P., 1212, 1223 | Chobanian, A. V., 551 | Edwards, J. E., 173, 565, 585, 994, 1005 |
| Bogren, H. G., 447 | Chung, K. J., 673 | |
| Bonte, F. J., 55 | Chuquimia, R., 596, 638 | |

Ehrlich, B., 193
 Eich, R. H., 63
 Eliot, R. S., 1127
 Elizari, M. V., 597, 818
 Ellis, K., 390
 El-Said, G. M., 952
 El Shahawy, M., 1185
 El-Sherif, N., 837, 848
 Engell, H. C., 1023
 Engle, M. A., 401
 Engstrom, F., 460
 Epstein, F. H., 595
 Epstein, S. E., 291, 298, 467, 943, 1016, 1116
 Evans, R. G., 1078

Falsetti, H. L., 165
 Farber, S. J., 390
 Farrington, J. F., (May) A-1
 Faulkner, S. L., 709
 Feigenbaum, H., 768, 876, 1153
 Feinleib, M., Page 6
 Fercho, W., 1160
 Ferguson, E. W., 1262
 Ferrer, M. I., 390
 Fiorani, P., 1023
 Fisch, C., 193
 Fischel, E. E., 390
 Flamm, M. D., Jr., 688
 Fogarty, T. J., 77
 Forester, W., 517
 Forker, A. D., 334
 Forrester, J. S., 748
 Fouron, J. C., 1107
 Fox, A. C., 390, 399
 Frederick, R., 309
 Fredrickson, D. S., 476
 Freed, M. D., 1175
 Freedom, R. M., 375
 French, J. W., 226
 Friedlich, A. L., 203
 Friedman, W. F., 232, 1266
 Friesinger, G. C., 489
 Froggatt, P., 367
 Fruehan, C. T., 63

Gaasch, W. H., 246
 Gallagher, J. J., 206, 799, 805, 1021
 Galioto, F. M., Jr., 952
 Gander, M. P., 599
 Garrison, H., 1053
 Gazes, P. C., 196
 Gersony, W. M., 508
 Gibaldi, M., 391
 Gibson, T. C., 434, 441
 Giles, T. D., 678
 Gillis, R. A., 86, 272
 Gilman, A., 399
 Giuliani, E. R., 455
 Glancy, D. L., 467
 Godman, M. J., 214
 Goldberg, S. J., 1022
 Golden, M. S., 1011
 Goldner, S. J., 748
 Goldschlager, N., 1020

Goldstein, R. A., 943
 Goldstein, R. E., 291, 298, 943, 1016
 Goodman, D. J., 631, 780
 Gorlin, R., 498, 1028, 1063
 Goulden, D., 1257
 Graham, A. F., 361
 Graham, T. P., Jr., 709
 Gramiak, R., 673, 870, 1266
 Greene, H. L., 106
 Greenfield, J. C., Jr., 829
 Greenwald, J. G., 1019
 Grehl, T. M., 298
 Griffith, J. M., 1147
 Griffiths, S. P., 390
 Grondin, C. M., 703
 Grossman, W., 129, 441, 1185
 Guiha, N. H., 755
 Gulco, L., 717
 Gulotta, S. J., 717
 Gupta, P. R., 357
 Gupta, R. L., 165
 Gupta, R. P., 958

Hackel, D. B., 772
 Hagan, A. D., 232, 1266
 Hagemeyer, F., 1053
 Halimos, E., 1254
 Hallman, G. L., 952
 Halpern, M. S., 597, 818
 Hamilton, B. P., 900
 Hamilton, G. W., 47
 Hammermeister, K. E., 729, 739
 Harrison, D. C., 77, 226, 255, 361, 428, 631
 Harter, J. G., 395
 Harvey, R. M., 390, 399
 Hastings, J. E., 1011
 Hastreiter, A. R., 1047
 Haynes, F. W., 152
 Helfant, R. H., 42, 654
 Henry, W. L., 1147
 Herman, M. V., 1063
 Heymann, M. A., 978
 Hirshfeld, J. W., Jr., 291
 Hirschman, J. C., 790
 Hodges, M., 115
 Hoffman, B. F., 1232
 Hoffman, J. I. E., 326, 978
 Hoffman, W., 460
 Hood, W. B., Jr., 1262
 Hooja, V., 7
 Horn, H. R., 1063
 Horwitz, L. D., 55, 124
 Hu, M., 77
 Humphries, J. O., 489
 Hurst, J. W., 199
 Huston, J. H., 68
 Hyman, R. M., 943

Imai, Y., 761
 Ionescu, M. I., 237
 Isbell, M. W., 415
 Itscoitz, S. B., 467
 Izukawa, T., 214

Jacobson, L. B., 579
 Jelinek, R. H., 659
 James, T. N., 367, 772, 1239
 Jameson, A. G., 390
 Jersaty, R. M., 1267
 John, S., 958
 Johnson, L., 63
 Johnson, W. D., 68
 Jones, R. H., 512
 Josephson, M. E., 805
 Judkins, M. P., 599

Kannel, W. B., 1160
 Kaplan, S., 925
 Karp, R. B., 1190
 Kasell, J., 206, 1021
 Kattus, A. A., 423
 Keane, J. F., 1175
 Kearney, E. A., 881
 Kelemen, M. H., 1267
 Kelesides, C., 1254
 Kelly, D. T., 106
 Kennedy, J. W., 47
 Kent, K. M., 943
 Kerber, R. E., 1038
 Kettel, L. J., (May) A-1
 Khanna, P. K., 115
 Killip, T., 390, 399
 Kilman, J. W., 1167
 King, S. B., III, 1020
 Kinsley, R. H., 574
 Kirklin, J. W., 933, 1190
 Kirsh, M. M., 530
 Kitamura, N., 761
 Klein, M. D., 1053
 Klie, J. H., 63
 Kloster, F. E., 560
 Kniffen, F. J., 264
 Kong, Y., 348, 606, 1247
 Konno, S., 761
 Kornreich, F., 1212, 1223
 Kotler, M. N., 194
 Kouhoukos, N. T., 1021, 1190
 Kramer, D. H., 222
 Krasula, R. W., 1047
 Kravis, T. C., 158
 Kreutzer, E., 13
 Krishnaswamy, S., 958
 Krongrad, E., 1232
 Krovetz, L. J., 375
 Kuller, L., 489, Page 6
 Kunkel, F., 894
 Kuschner, M., 390
 Kusumi, F., 309, 696

Labarthe, D., Page 6
 Lassen, N. A., 1023
 Lau, G., 624
 Lau, S. H., 805, 811
 Lazzara, R., 837, 848
 Lazzari, J. O., 818
 LeBlanc, A. D., 338
 Lefkowitz, R. J., 783
 Legato, M. J., 399
 Lekagul, N. H., 755

- Leon, D. F., 316
 Leone, A., 1127
 Lesch, M., 1028
 Lespérance, J., 703
 Lester, R. G., 1247
 Levitsky, S., 1047
 Lev, M., 615
 Levi, R. J., 597, 818
 Levy, G., 391
 Levy, R. I., 476
 Lewis, A. B., 978
 Lewis, R. P., 517
 Liberthson, R. R., 790
 Lichtman, M. A., 881
 Lie, K. I., 647
 Lightfoot, P., 595
 Lille, R. D., 551
 Lim, J. S., 1122
 Limas, C. J., 755
 Lindenbaum, J., 399
 Lindesmith, L. A., (May) A-1
 Linhart, J. W., 667
 Lipchik, E. O., 870
 Liu, V. Y., 98
 Logue, R. B., 1020
 Lohrbauer, L., 659
 Lomas, T. E., 264
 Lown, B., 659, 1015, 1053
 Longhurst, J., 535
 Lucas, R. V., Jr., 585, 948, 1102
 Lucchesi, B. R., 264
 Ludbrook, P., 1088
 Lukas, D. S., 399
 Lundström, N., 194
 Luz, P. L., 98

 McCabe, J. C., 401
 McGoon, D. C., 144, 574
 McGowan, R. L., 688
 McLaurin, L. P., 129, 441, 1019
 McNamara, D. G., 952
 McNeer, J. F., 606

 MacAlpin, R. N., 195, 423
 Madias, J. E., 498, 1262
 Madry, R., 441
 Mahoney, E. B., 870
 Mair, D. D., 144
 Malm, J. R., 390, 508, 1232
 Manley, J. C., 68
 Manning, J. A., 673, 870
 Marcus, M. L., 1038
 Marín-García, J., 565, 994
 Marriott, A., 309
 Marshall, T. K., 772, 1239
 Martin, N. D., 688
 Martinez, E. C., 678
 Mary, D. A. S., 237
 Mason, D. T., 447, 535
 Massumi, R. A., 447
 Mates, R. E., 165
 Maurer, B. J., 1021
 Mazzaferri, E. L., 900
 Meesmann, W., 1269

 Meister, S. G., 42
 Metcalfe, J., 560
 Miller, D. C., 77
 Miller, K., 585
 Miller, R. R., 447
 Miller, S., 717
 Mirowski, M., 858
 Moellering, R. C., Jr., 1132
 Moller, J. H., 565, 948, 994, 1102
 Moore, E. N., 858
 Moos, S. P., 129, 434
 Morris, J. J., Jr., 407
 Morrison, J., 399
 Moser, K. M., 158
 Moses, D. C., 179
 Moss, A. J., 222, 460
 Mower, M. M., 858
 Mueller, H. S., 1078
 Murgo, J. P., 1257
 Murphy, M. S., 881
 Murray, J. A., 47
 Myers, R. W., 943

 Nadas, A. S., 1175
 Nadolny, R. A., 316
 Nagel, E. L., 790
 Nanda, N. C., 870
 Nau, G. J., 597, 818
 Nave, E., 925
 Neal, W. A., 948
 Nelson, J. H., 709
 New York Heart Association
 Task Force on Digitalis
 Preparations, 399
 Niederberger, M., 309, 696
 Nobel-Allen, N. L., 264
 Novakovsky, A., 818
 Nussenfeld, S. R., 790

 Obeid, A. I., 63
 Oberman, A., 1021
 Odoroff, C., 460
 Odyniec, N. A., 455
 Olinger, G. N., 467
 Orgain, E. S., 348
 O'Toole, J. D., 316

 Pacifico, A. D., 1190
 Padmanabhan, V., 717
 Page, E. E., 489
 Page, L. B., 1132
 Pakrashi, B. C., 237
 Papazoglou, N. M., 1020
 Parisi, A. F., 900
 Parker, F. B., 63
 Parker, J. O., 136, 283
 Parkey, R. W., 55
 Parmley, W. W., 748
 Pasternac, A., 703
 Pearlman, A. S., 943
 Pepine, C. J., 887
 Peter, R. H., 348, 606, 1247
 Peterson, J. L., 696
 Peterson, K. L., 1088
 Petty, T. L., (May) A-1

 Pieroni, D. R., 375
 Pietras, R. J., 32
 Pistolese, G. R., 1023
 Pitt, B., 106
 Pluth, J. R., 455
 Popp, R. L., 226, 428, 1022
 Potts, J. L., 63
 Pressman, B. C., 1072
 Price, H. L., 1011
 Probst, P., 1020
 Proudfoot, W. L., 1122
 Puddu, V., 205

 Quarry, V. M., 594, 905
 Quarry-Pigott, V. M., 186
 Quinones, M. A., 246

 Ranganathan, N., 1268
 Rao, B. N. S., 173
 Rao, S., 948
 Rasmussen, S., 1153
 Rastogi, G. K., 357
 Reddy, P. S., 316
 Redwood, D. R., 1116
 Reese, H. E., 334
 Reis, R. L., 467
 Reitman, M. J., 952
 Religa, A., 1078
 Rider, A. K., 361
 Riley, R. C., 338
 Ritter, D. G., 144
 Rivers, R. J., Jr., 222
 Roberts, N. K., 214
 Roberts, W. C., 1, 921
 Robinson, R. G., 338
 Roe, C. R., 1190
 Rosati, R. A., 407, 606
 Rosen, K. M., 32, 596, 615, 638
 Rosenbaum, M. B., 597, 818
 Rosenberg, R. D., 603
 Rosenquist, G. C., 985
 Ross, J., Jr., 1088
 Ross, R. S., 489
 Rothbaum, D. A., 768, 1200
 Rowe, R. D., 375
 Rowland, M., 522, 894
 Rudd, M., 418
 Rudolph, A. M., 978
 Ryan, J. M., 1167

 Sabiston, D. C., Jr., 512
 Sahn, D. J., 232, 1266
 Sapsford, R. N., 1190
 Sanyal, S. K., 7
 Sasse, L., 595
 Schang, S. J., 887
 Scheinman, M. M., 522, 579, 894
 Scherer, J. L., 298, 1116
 Scherf, D., 787
 Scherlag, B. J., 837, 848
 Schreiner, B. F., 682
 Schroeder, J. S., 361
 Sealy, W. C., 206, 799, 1021
 Seidman, J. M., 1160

- Selzer, A., 1020
 Seningen, R. P., 298, 921
 Shaffer, A. B., 196
 Shaffer, A. I., 197
 Shafton, E., 522
 Shah, P. M., 115, 682
 Shappell, S. D., 780
 Shaver, J. A., 316
 Shekelle, R., Page 6
 Shepherd, R. L., 467
 Shibel, E. M., 158
 Shubin, H., 98
 Shumway, N. E., 77, 361
 Siaterlis, J., 1254
 Silver, M. D., 1268
 Silver, T. M., 179
 Silverman, J., 1239
 Silverman, J. F., 226, 428
 Sinha, M. K., 357
 Skelly, J. P., 395
 Skloven, D., 1088
 Smith, K. L., 1018
 Smith, T. W., 399
 Smulyan, H., 63
 Sodeman, T. M., 530
 Soeldner, J. S., 1028
 Sones, F. M., Jr., 1122
 Soyka, L. F., 1047
 Spear, J. F., 858
 Spitaels, S., 1107
 Spodick, D. H., 196, 594, 780, 905, 1263
 Stanger, P., 978
 Starek, P. J. K., 434
 Starr, J. W., 829
 Startmer, C. F., 606
 Stead, E. A., Jr., 1022
 Steers, A. W., 395
 Stefadourous, M. A., 129, 1185
 Stemmer, E. A., 415
 Stephan, K., 1269
 Stewart, D. K., 47
 Stinson, E. B., 226, 298, 361, 467
 Stockert, J., 925
 Stone, F. M., 1102
 Stone, N. J., 476
 Strauss, H. C., 206, 1021
 Strauss, H. W., 688
 Sukumar, I. P., 958
 Svenson, R. H., 206, 799, 1021
 Swan, H. J. C., 748
 Szarfman, A., 13
 Takao, A., 761
 Tandon, R., 565, 994, 1005
 Tavel, M. E., 4, 1264
 Taylor, D. R., 106
 Tector, A. J., 68
 Teichholz, L. E., 1028, 1063
 Tercyak, A., 551
 Tewari, P., 7
 Thapar, M. K., 7
 The Coronary Drug Project
 Research Group, 862
 The Criteria Committee of the
 New York Heart Association, 390
 Thibodeaux, H., 272
 Thomas, C. N., 900
 Thompson, M. E., 316
 Tracy, W. G., 933
 Truccone, N. J., 508
 Turner, M. E., 1021
 Turnoff, H. B., 667
 Tyberg, J. V., 748
 Usher, B. W., 1257
 Uther, J. B., 1088
 Van Praagh, R., 1175
 Vargas, G., 624
 Varghese, P. J., 375, 805
 Verter, J., 476
 Vincent, W. R., 326
 Wagner, G. S., 407, 829
 Wahi, P. L., 357
 Waisser, E., 246
 Waldo, A. L., 1232
 Wallace, A. G., 206, 799, 1021
 Wallace, R. B., 144, 455
 Walston, A., II, 829
 Walton, J. A., Jr., 530
 Warbasse, J. R., 729, 739
 Weaver, W. F., 334
 Webb, W. R., 63
 Weil, M. H., 98
 Weiss, A. N., 522
 Weissler, A. M., 517
 Wellens, H. J. J., 22, 647
 Wells, H. P., Jr., 688
 West, R., 283
 Whitbeck, A. A., 881
 Wisheart, J. D., 933
 White, R. D., 375
 Wigle, E. D., 1268
 Wilke, T. A., 517
 Williams, R. G., 418
 Witham, A. C., 1185
 Wilson, C. S., 334
 Wooley, C. F., 1167
 Wright, I. S., 387
 Wu, D., 32, 615, 638
 Wyatt, H. L., 748
 Yanagi, R., 1047
 Yates, J. D., 530
 Young, D. T., 129
 Yu, P. N., 115
 Zabriskie, J., 401
 Zaret, B. L., 688
 Zeff, H. J., 68
 Zelis, R., 447, 535
 Zipes, D. P., 1200

SUBJECT INDEX

A

- Accessory pathways**
unusual properties of, 1200
ventriculo-atrial conduction in WPW syndrome, 22
- Acculturation effects**
cardiovascular disease in six Solomon Islands tribal societies, 1132
- Acetyl strophanthidin tolerance testing**
serum digoxin level measurement and, 1053
- Adrenergic receptors**
selectivity in beta-adrenergic responses, 783
- Afferent vagal tone**
role of vagus nerves, 86
- Afterload**
circumferential fiber shortening and tension, 925
- Age**
influence of heart rate and age on systolic and diastolic time intervals in children, 1107
- Akinesis**
ECG assessment of ventricular dyssynergy, 447
- Alcoholic beverages**
acute effects of ethanol on LV performance, 124
impaired LV function in alcoholic cirrhosis with ascites, 755
- AHA Committee Report**
Criteria for Evaluation of Automated Blood Pressure Measuring Devices for Use in Hypertensive Screening Programs, Page 6 at back of March, 1974 issue
- Amyl nitrite**
LV volume changes after nitrites, 136
- Anastomosis**
ascending aorta to right pulmonary artery, 952
- Anatomy**
tetralogy of Fallot, 173
- Anemia**
adequacy of myocardial oxygen delivery, 968
- Aneurysm**
echocardiographic manifestation of right sinus of Valsalva aneurysm, 768
of membranous ventricular septum in childhood, 375
ventricular
effect of inotropic agents on dyskinesia of acutely ischemic myocardium, 1038
ECG assessment of ventricular dyssynergy, 447
- Angina pectoris**
changes in LV diastolic stiffness and tone, 255
computer diagnosis from "maximal" QRS surface waveform information at rest, 1212
coronary artery disease and type II hyperlipoproteinemia, 476
coronary ostial stenosis following aortic valve replacement, 530
exercise stress tests
in angiographically documented coronary artery disease, 348
maximal exercise performance and ouabain treatment, 309
functional aerobic impairment in coronary heart disease, 696
left main coronary artery stenosis: results of coronary bypass surgery, 68
LV volume changes after amyl nitrite and nitroglycerin, 136
myocardial balance of inorganic phosphate and enzymes, 283
natural history of ischemic heart disease, 489
nitrates in prophylactic treatment of, 1015
perhexiline and coronary responses, 887
saphenous vein bypass surgery
long-term follow-up, 77
results in a community hospital, 334
unstable angina, 196
selective coronary arteriography in young men: follow-up study, 1122
syndrome of systolic click, murmur, and mitral valve prolapse, 717
treatment selection in coronary artery disease, 606
"variant" 787
- Angiocardiology**
mitral valve prolapse syndrome, 428
- Angiography**
biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
diagnosis of pulmonary embolism, 179
echocardiographic findings in discrete subvalvular aortic stenosis, 226, 673
exercise stress test in documented coronary artery disease, 348
potassium-43 myocardial imaging, 688
quantitation of left-to-right cardiac shunts with radionuclide angiography, 512
- Animal studies**
cats
role of vagus nerves in cardiovascular changes induced by coronary occlusion, 86
dogs
adequacy of myocardial oxygen delivery, 968
bilateral bundle branch block, 848
circumferential fiber shortening and tension, 925
conduction disorders in proximal His-Purkinje system after myocardial ischemia, 837
effects of nitroglycerin and methoxamine on MI, 291
experimental pulmonary embolism, 152
incorporation of radiolabelled fibrinogen into venous thrombi, 158
patterns of ventricular activity during catheter defibrillation, 858
relationships between automaticity and conduction, 818
segmental ischemic dysfunction, 748
simultaneous measurement of total and nutritional coronary blood flow, 338
vagal stimulation, bradycardia and ventricular fibrillation, 943
- Anomalous pulmonary venous drainage**
syndrome of systolic click, murmur and mitral valve prolapse, 717
- Anterior septal artery**
bilateral bundle branch block, 848
intra-His bundle block, 837
- Antiarrhythmic agents**
chloridazepoxide, 272
lidocaine and methyl lidocaine, 264
model for studying, 818
- Antibodies and vascular structures**
Chagasic cardiopathy, 13
postpericardiotomy syndrome and antiheart antibodies, 401
- Anticoagulants**
heparin action, 603
- Aorta**
ascending aorta to right pulmonary artery anastomosis, 952
coarctation of. *See* Coarctation of the aorta
developmental complex including supra-valvular stenosis of the aorta and pulmonary trunk, 585
- Aortic arch interruption**
surgical correction of truncus arteriosus, 144
- Aortic arch syndrome**
developmental complex including supra-valvular stenosis of the aorta and pulmonary trunk, 585
- Aortic insufficiency**
echocardiographic manifestation of right sinus of Valsalva aneurysm, 768
- Aortic regurgitation**
ultrasound and bicuspid aortic valve, 870
- Aortic root**
echocardiographic detection of supra-valvular aortic stenosis, 1257
- Aortic stenosis**
echocardiographic findings in discrete subvalvular aortic stenosis, 226, 673
echocardiographic manifestation of right sinus of Valsalva aneurysm, 768
evaluation of subendocardial ischemia in valvar aortic stenosis in children, 978
LV subendocardial ischemia in severe valvar and supra-valvular aortic stenosis, 326
prosthetic
method to prevent its occurrence, 921

- supravalvular, 326
 - echocardiographic detection, 1257
 - ultrasound and bicuspid aortic valve, 870
 - ultrasound in IHSS and LV outflow obstruction, 673
- Aortic valve**
 - bicuspid, echocardiographic recognition, 870
 - echocardiographic findings in discrete subvalvular aortic stenosis, 226
 - quantitation of left-to-right shunts, 512
 - replacement
 - coronary ostial stenosis following, 530
 - coronary perfusion vs. cold ischemic arrest, 1190
 - prevention of prosthetic aortic stenosis, 921
 - ultrasound in right sinus of Valsalva aneurysm, 768
- Aortocoronary bypass surgery**
 - deterioration of myocardial function following, 467
 - potassium-43 myocardial imaging, 688
 - results of saphenous vein graft surgery in a community hospital, 334
- Aortograms**
 - preoperative, to prevent prosthetic aortic stenosis, 921
- Apexcardiogram**
 - A wave and LV diastolic stiffness, 441
 - fourth heart sound, 4
 - influence of heart rate and age on systolic and diastolic time intervals in children, 1107
- Arrhythmias**
 - antiarrhythmic agents
 - chlordiazepoxide, 272
 - lidocaine and methyl lidocaine, 264
 - for sporadic ventricular ectopic arrhythmias, 659
 - comparison of serum digoxin level measurement with acetyl strophanthidin tolerance testing, 1053
 - comparison of transmural and nontransmural AMI, 498
 - effects of vagal stimulation and bradycardia in acute myocardial ischemia, 943
 - electrophysiologic effects of procaine amide on IV conduction delay, 522
 - observations on ventricular tachycardia, 647
 - optimal antiarrhythmic heart rate, 654
 - rate dependent ventricular ectopia following acute coronary occlusion, 654
 - relation of electrolyte disturbances to, 193
 - role of vagus nerves in cardiovascular changes induced by coronary occlusion, 86
 - surgical correction of WPW (type A), 206
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
 - ventricular ectopic
 - antiarrhythmic drug therapy for sporadic, 659
 - optimal antiarrhythmic heart rate, 654
- Arterial disease**
 - effect of carbon monoxide exposure on intermittent claudication, 415
- Arteriography, coronary**
 - discrepancies between cineangiographic and postmortem findings, 702
 - maximum treadmill exercise tests in abnormal control ECG, 667
 - natural history of ischemic heart disease, 489
 - prevention of complications, 599
- Arthritis**
 - childhood rheumatic fever in North India, 7
- Asymmetric septal hypertrophy**
 - biventricular cineangiography in evaluation of, 1116
- Asynergy**
 - augmentation of LV contraction pattern in coronary artery disease by inotropic catecholamine, 1063
- Atherosclerosis**
 - cardiovascular disease in tribal societies, 1132
 - comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
 - coronary thrombosis and fatal myocardial ischemia, 1
 - effect of carbon monoxide exposure on intermittent claudication, 415
 - LV function and coronary artery anatomy before and after MI, 47
 - natural history of ischemic heart disease, 489
 - necropsy studies in MI without occlusion, 1127
 - role of thrombosis in development of plaques, 1161
- Atria**
 - premature atrial impulses, cycle length and cardiac refractory periods, 32
 - right atrial volume measurements from biplane cineangiocardiology, 709
 - unmasking and conversion of gap phenomenon, 624
- Atrial echo beats**
 - intraventricular conduction delay as determinant of, 805
- Atrial fibrillation**
 - mitral stenosis and, 1019
- Atrial pacing**
 - effects of nitroglycerin on LV wall motion in coronary artery disease, 682
 - myocardial balance of inorganic phosphate and enzymes, 283
 - optimal antiarrhythmic heart rate, 654
 - permanent percutaneous atrial pacing from coronary vein, 222
- Atrial septal defect**
 - and associated anomalies in infancy, 1005
 - echocardiographic features of endocardial cushion defects, 418
 - ostium primum
 - A-V conduction in incomplete endocardial cushion defect, 631
 - quantitation of left-to-right cardiac shunts, 512
 - right atrial volume measurements, 709
- Atrio-ventricular block**
 - L'Activité du Faisceau de His Normale et Pathologique* (Puech and Grolleau), 592
 - catheter-induced intra-Hisian and intra-fascicular block during His bundle electrograms, 579
 - paroxysmal, 579
 - intra-His bundle block, 837
 - significance of second degree A-V block and BBB, 638
- Atrio-ventricular conduction**
 - in congenital heart disease: delineation of distal His bundle and Rbb, 1232
 - effects of lidocaine on intraventricular conduction defects, 894
 - effects of procaine amide on IV conduction, 522
 - in incomplete endocardial cushion defect, 631
 - unmasking and conversion of gap phenomenon, 624
- Atrio-ventricular node**
 - coronary vessels and conduction system in homocystinuria, 367
 - cycle length and cardiac refractory periods, 32
 - gap phenomena during retrograde conduction, 811
 - occluded artery, 772
 - unmasking and conversion of gap phenomenon, 624
 - Wenckebach cycles and reentry, 197
- Atropine**
 - role of vagus nerves, 86
 - unmasking and conversion of gap phenomenon, 624
- Automaticity**
 - comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
 - observations on ventricular tachycardia, 647
 - relationships between depressed conduction and, in main intraventricular conduction fascicles of human and canine heart, 818
- Autonomic denervation**
 - acute effects of ethanol on LV performance, 124
- Autopsy findings**
 - discrepancies between cineangiographic and postmortem findings in coronary artery grafting, 702

B

- Bacterial endocarditis**
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
- Bed rest**
 - metabolic and hemodynamic effects in normal subjects, 551
- Beta-adrenergic blockade**
 - electrical alternans with lowering of heart rate in massive pericardial effusion, 1254
 - propranolol in treatment of AMI, 1078
 - selectivity in: clinical implications, 783
- Bicuspid aortic valve**
 - echocardiographic recognition, 870
- Bigeminy**
 - posthospital phase of MI, 460
- Bilateral bundle branch block**
 - pathophysiology, 848

- Bioavailability of drugs**
digoxin, 391
- Biventricular hypertrophy**
computer diagnosis from "maximal" surface waveform information, 1223
- Blalock-Taussig**
systemic-pulmonary shunt surgery in infants, 508
- Blood clots**
experimental pulmonary embolism; effect on pulmonary blood volume and vascular compliance, 152
- Blood flow**
cerebral
critical lower level and carotid surgery, 1023
comparison of measurements by plethysmography and flowmeter during steady state forearm exercise, 535
myocardial oxygen consumption and, after valve replacement, 933
nitroglycerin and coronary collateral function, 298
perhexiline and coronary responses, 887
Peripheral Vascular Surgery: Hemodynamics of Arterial Pulsatile Blood Flow (Lee and Trainor), 1013
rate of change of LV volume, 729
simultaneous measurement of total and nutritional coronary blood flow in dogs, 338
See also Coronary blood flow
- Blood pressure**
antiarrhythmic effect of chlorthalidopoxide, 272
cardiac responses to sitting and supine isometric exercises, 905
cardiovascular disease in tribal societies, 1132
role of vagus nerves, 86
See also Hypertension
- Blood transfusions**
Blood Transfusion in Clinical Medicine (Mollison), 385
- Blood volume**
effects of plasma volume expansion in AMI, 106
lung water in patients with AMI, 115
plasma volume in shock with AMI, 98
- Books Received**, 192
- Book Reviews**, 189, 385, 591, 778, 1013, 1260
- Bradycardia**
optimal antiarrhythmic heart rate, 654
and vagal stimulation during experimental acute myocardial ischemia, 943
- Bradycardia-dependent block**
bilateral bundle branch block, 848
intra-His bundle block, 837
- Brady-tachy syndrome**
permanent percutaneous atrial pacing, 222
- Bronchogenic carcinoma**
pulmonary varix and, 1011
- Bundle branch block**
relation of automaticity and depressed conduction, 818
significance of second degree A-V block and, 638
- Bypass surgery**
results of saphenous vein graft surgery in a community hospital, 334
See also under Surgery
- C**
- Calcium**
coronary calcification detected by fluoroscopy, 1247
inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
thrombotic calcific mitral stenosis: morphology of calcific mitral valve, 1167
- Carbon monoxide**
effect on intermittent claudication, 415
- Cardiac arrest**
prehospital ventricular fibrillation and sudden death, 790
- Cardiac cycle**
influence of heart rate and age on systolic and diastolic time intervals in children, 1107
- Cardiac index**
effects of plasma volume expansion in AMI, 106
lung water in patients with AMI, 115
rest and exercise hemodynamics in children with pulmonary stenosis, 1102
- Cardiac output**
differentiation of coronary lesions by coronary blood flow measurements during isoproterenol infusion, 55
impaired LV function in alcoholic cirrhosis with ascites, 755
myocardial blood flow and oxygen consumption after valve replacement, 933
- Cardiac performance**
echocardiographic assessment of LV performance in normal newborns, 232
vital capacity and congestive heart failure: Framingham study, 1160
- Cardiogenic shock**
plasma volume in shock with AMI, 98
- Cardiology**
Cardiology Case Studies — 55 Case Histories Related to Cardiology (DePasquale and Bruno), 1013
Recent Advances in Cardiology (Hamer, ed.), 189
- Cardiomyopathy**
echocardiographic features of congestive, compared with normals and with coronary artery disease, 1153
paradoxical motion of interventricular septum in LBBB, 423
- Cardiopulmonary bypass**
coronary perfusion vs. cold ischemic arrest in aortic valve replacement, 1190
digoxin levels in children undergoing, 1047
- Cardiovascular disease**
antecedents in six Solomon Islands tribal societies, 1132
guidelines for prevention and care resources: reports of Inter-Society Commission for Heart Disease Resources, 387
- Cardiovascular mechanisms**
functional aerobic impairment in coronary heart disease, 696
role of vagus nerves, 86
- Carditis**
attacks of acute rheumatic fever during childhood in North India, 7
- Carotid artery ligation**
critical lower level of cerebral blood flow, 1023
- Case reports**
correct transposition of great arteries and ventricular rotation, 574
echocardiographic manifestation of right sinus of Valsalva aneurysm, 768
- Catecholamines**
augmentation of LV contraction pattern in coronary artery disease by inotropic catecholamine, 1063
effect of propranolol on oxygen binding to hemoglobin, 881
epinephrine ventriculogram, 1063
inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
metabolic and hemodynamic effects of bed rest in normal subjects, 551
- Catheters and catheterization**
analysis and correction of pressure wave distortion in fluid-filled catheter systems, 165
balloon tipped catheter for obtaining His bundle electrograms without fluoroscopy, 42
biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
cardiac responses to sitting and supine isometric exercises, 905
catheter-induced intra-Hisian and intrafascicular block during His bundle electrograms, 579
intracardiac repair in tetralogy of Fallot: hemodynamic studies following surgery, 958
intracardiac study of second heart sound, 316
patterns of ventricular activity during catheter defibrillation, 858
quantitation of left-to-right shunts, 512
subendocardial ischemia evaluation in valvar aortic stenosis in children, 978
transfemoral cardiac pacing and phlebitis, 1018
- Cations**
effect of propranolol on oxygen binding to hemoglobin, 881
- Cells**
The Myocardial Cell for the Clinical Cardiologist (Legato), 1013
- Central nervous system**
comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
- Cerebral blood flow**
critical lower level, with particular reference to carotid surgery, 1023
- Cesium-131**
total and nutritional blood flow in dogs, 338

Chagas' heart disease

- serum gamma globulin factor which reacts with endocardium and vascular structures, 13

Chest X-rays

- diagnosis of pulmonary embolism, 179

Children and infants

- aneurysm of membranous ventricular septum, 375
- aortic stenosis
 - subendocardial ischemia evaluation, 978
- cardiopulmonary bypass
 - digoxin levels during, 1047
- coarctation of the aorta
 - with congenital mitral regurgitation, 1175
- common (single) ventricle
 - with normally related great vessels, 565
 - with transposition, 994
- corrected transposition of great arteries and ventricular rotation, 574
- endocardial cushion defects, echocardiographic features, 418
- Essentials of Pediatric Cardiology* (Moller), 778
- Heart Disease: in Infancy, Diagnosis and Surgical Treatment* (Barratt-Boyes, Neutze, and Harris), 592
- infants
 - atrial septal defect and associated anomalies, 1005
 - echocardiographic assessment of LV performance in normal newborns, 232, 1266
 - severe congenital tricuspid incompetence in neonates, 962
 - systemic-pulmonary arterial shunts, 508
- influence of heart rate and age on systolic and diastolic time intervals, 1107
- Neonate Heart Disease* (Friedman, Lesch and Sonnenblich, eds.), 190
- pulmonary stenosis, 1102
 - exercise and isoproterenol in, 948
 - rest and exercise hemodynamics, 1102
- rheumatic fever, initial attack during childhood in North India, 7
- surgery
 - ascending aorta to right pulmonary artery anastomosis, 952
 - postpericardiotomy syndrome and antiheart antibodies, 301
 - See also under Surgery*

Chlordiazepoxide

- antiarrhythmic properties, 272

Cholesterol

- cardiovascular disease in tribal societies, 1132

Cholinergic innervation

- effects of vagal stimulation and bradycardia in acute myocardial ischemia, 943

Chordae tendineae

- congenital mitral valve disease associated with coarctation of the aorta, 985
- exploratory "scanning" in echocardiographic diagnosis of ruptured chordae tendineae, 678

Chorea

- childhood rheumatic fever in North India, 7

Chronic obstructive pulmonary disease

- community resources for rehabilitation of patients, A-1

Cigarette smoking

- coronary artery disease and type II hyperlipoproteinemia, 476
- effect of carbon monoxide exposure on intermittent claudication, 415

Cineangiocardiology

- right atrial volume measurements, 709

Cineangiography

- biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
- comparison of isovolumic and ejection phase indices of myocardial performance, 1088
- discrepancies between cineangiographic and postmortem findings in coronary artery grafting, 702
- rate of change of LV volume, 729
- diastolic events, 739
- validation and peak systolic ejection rate, 729

Circulation

- collateral, exercise stress test in documented coronary artery disease, 348
- perhexiline and coronary responses, 887
- See also Blood flow*

Circumferential fiber shortening velocity

- evaluation of LV performance, 925

Clinical profile

- childhood rheumatic fever in North India, 7

Clinicopathologic correlations

- atrial septal defect and associated anomalies, 1005
- conditions simulating tetralogy of Fallot, 173
- coronary vessels and conduction system in homocystinuria, 367
- developmental complex including supraaortic stenosis of the aorta and pulmonary trunk, 585
- occluded A-V node artery, 772
- sudden death, two young soldiers, 1239

Coarctation of the aorta

- with congenital mitral regurgitation, 1175
- congenital mitral valve disease and, 985
- ultrasound in IHSS and LV outflow obstruction, 673

Coin lesion

- radiologic appearance of pulmonary varix and, 1011

Cold ischemic arrest

- versus coronary perfusion during aortic valve surgery, 1190

Common (single) ventricle

- with normally related great vessels, 565
- with transposition, 994

Community resources

- pulmonary rehabilitation, A-4

Complete atrioventricular canal

- echocardiographic features of endocardial cushion defects, 418

Complete heart block

- A-V conduction system in congenital heart disease, 1232

Compliance

- effects of plasma volume expansion in M1, 106
- segmental ischemic dysfunction, 748

Computer analysis

- biventricular hypertrophy from "maximal" surface waveform information, 1223
- diagnosis of angina pectoris from "maximal" QRS surface waveform information at rest, 1212
- treatment selection in coronary artery disease, 606

Conduction disorders

- aberrant conduction, cycle length and cardiac refractory periods, 32
- bilateral bundle branch block, 848
- effects of cycle length on cardiac refractory periods, 32
- intra-His bundle block, 837
- intraventricular,
 - electrophysiologic effects of lidocaine, 894
 - electrophysiologic effects of procaine amide, 522
- in proximal His-Purkinje system after myocardial ischemia, 837
- significance of second degree A-V block and BBB, 638
- after surgery for ventricular septal defect and tetralogy of Fallot: analysis by His bundle recordings, 214
- ventriculo-atrial conduction in WPW, 22

Conduction system

- A-V conduction system in congenital heart disease, 1232
- A-V nodal Wenckebach cycles and re-entry, 197
- coronary vessels and conduction system in homocystinuria, 367
- gap phenomena during retrograde conduction, 811
- occluded A-V node artery, 772
- pathophysiologic correlations in split His bundle potentials, 615
- relationships between automaticity and depressed conduction, 818
- unusual properties of accessory pathways, 1200

Conduction times

- atrial echo beats, 805

Congenital heart disease

- aneurysm of membranous ventricular septum, 375
- aortic stenosis, evaluation of subendocardial ischemia, 978
- A-V conduction system: delineation of distal His bundle and RBB, 1232
- bicuspid aortic valve, 870
- coarctation of the aorta with mitral regurgitation, 1175
- common (single) ventricle
 - with normally related great vessels, 565
 - with transposition, 994
- corrected transposition of great arteries and ventricular rotation and, 574
- cyanosis, ascending aorta to right pulmonary artery anastomosis, 952
- developmental complex including supraaortic stenosis of the aorta and pulmonary trunk, 585
- exercise and isoproterenol in pulmonary valvar stenosis, 585, 948
- The Fourth Conference on the Clinical Delineation of Birth Defects. Part XV. The Cardiovascular System* (Bergsma), 190
- homocystinuria, coronary vessels and conduction system, 367

- incomplete endocardial cushion defect, 631
 mitral valve disease associated with coarctation of the aorta, 985
 right atrial volume measurements, 709
 right sinus of Valsalva aneurysm, 768
 severe tricuspid incompetence in neonates, 962
 subvalvular aortic stenosis, 585
 echocardiographic findings, 226
 systemic-pulmonary shunt surgery in infants, 508
 Taussig-Bing heart with mitral valve straddling, 761
 truncus arteriosus, surgical correction, 144
- Congestive heart failure**
 ascending aorta to right pulmonary artery anastomosis, 952
 comparison of transmural and nontransmural AMI, 498
 contractile response to digitalis glycosides in normal subjects, 517
 diastolic descent of mitral valve, 246
 echocardiography in congestive cardiomyopathy compared with coronary artery disease, 1153
 saphenous vein bypass surgery follow-up, 77
 vital capacity and risk of, 1160
- Contractile force**
 antiarrhythmic effect of chlorthalidopoxide, 272
 role of vagus nerves, 86
- Contractility**
 augmentation of LV contraction in coronary artery disease, 1063
 circumferential fiber shortening and tension, 925
 contractile response to digitalis glycosides in normal subjects, 517
 inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
- Cor pulmonale**
 pulmonary rehabilitation, A-1
 See also Pulmonary rehabilitation
 rehabilitation of patients, A-1
- Cor triloculare biatriatum**
 common (single) ventricle with normally related great vessels, 565
 single ventricle with transposition, 994
- Coronary arteries**
 anatomy and LV function before and after MI, 47
 calcification detected by fluoroscopy, 1247
 lesions, differentiation of physiologically significant lesions by coronary blood flow measurements during isoproterenol infusion, 55
- ligation**
 comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
 segmental ischemic dysfunction, 748
 necropsy studies in MI with minimal or no coronary luminal reduction due to atherosclerosis, 1127
 occlusion, effect of inotropic agents on dyskinesia of acutely ischemic myocardium, 1038
 thrombosis and fatal myocardial ischemia, 1
- Coronary arteriography**
 coronary calcification detected by fluoroscopy, 1247
 discrepancies between cineangiographic and postmortem findings, 702
 exercise stress test in documented coronary artery disease, 348
 left main coronary artery stenosis: results of coronary bypass surgery, 68
 LV function and coronary artery anatomy before and after MI, 47
 maximum treadmill exercise tests in abnormal control ECG, 667
 natural history of ischemic heart disease, 489
 nitroglycerin and intraoperative coronary collateral function in patients with coronary occlusive disease, 298
 prevention of complications, 599
 syndrome of systolic click, murmur, and mitral valve prolapse, 717
 in young men: follow-up study, 1122
- Coronary artery disease**
 changes in LV diastolic stiffness and tone during angina, 255
 coronary calcification detected by fluoroscopy, 1247
 diastolic descent of mitral valve, 246
 discrepancies between cineangiographic and postmortem findings, 703
 differentiation of coronary lesions by coronary blood flow measurements during isoproterenol infusion, 55
 echocardiographic features of congestive cardiomyopathy compared with, 1153
- effect of carbon monoxide exposure on intermittent claudication, 415
 effects of nitroglycerin on LV wall motion, 682
 ECG assessment of ventricular dyssynergy, 447
 epinephrine ventriculogram, 1063
 exercise testing, 1267
 graded stress tests, 348
 maximum treadmill exercise tests in abnormal control ECG, 667
 gas endarterectomy of right coronary artery: importance of proximal bypass graft, 63
 in familial type II hyperlipoproteinemia, 476
 left bundle branch block, 876
 left main coronary artery stenosis: results of coronary bypass surgery, 68
 medical and surgical management of patients, 606
 myocardial balance of inorganic phosphate and enzymes, 283
 nitroglycerin and intraoperative coronary collateral function, 298
 perhexiline and coronary responses, 887
 saphenous vein bypass, long-term follow-up, 77
 selective coronary arteriography in young men: follow-up study, 1122
 treatment selection, 606
 VGC criteria for diagnosis of inferior MI, 829
- Coronary blood flow**
 differentiation of coronary artery lesions by blood flow measurements during isoproterenol infusion, 55
 evaluation of subendocardial ischemia in aortic stenosis in children, 978
 LV subendocardial ischemia in severe valvar and supra-valvar aortic stenosis, 326
 myocardial blood flow and oxygen consumption after valve replacement, 933
 perhexiline and coronary hemodynamic and myocardial metabolic responses, 887
 propranolol in treatment of AMI, 1078
 regional, adequacy of myocardial oxygen delivery, 968
- Coronary care units**
 comparison of transmural and nontransmural AMI, 498
- Coronary collateral circulation**
 exercise stress test in documented coronary artery disease, 348
- Coronary collateral function**
 nitroglycerine and, 298
- Coronary Drug Project**
 LV hypertrophy patterns and prognosis, 862
- Coronary heart disease**
Early Phases of Coronary Heart Disease: The Possibility of Prediction (Waldenström, Larsson and Ljungstedt, eds.), 778
Exercise Testing and Training in Coronary Heart Disease (Detry), 591
 functional aerobic impairment in, 696
 LV hypertrophy patterns and prognosis, 862
 marathon running to prevent, 594
 natural history of ischemic heart disease, 489
 postinfarction ventricular septal rupture, 455
- Coronary occlusion**
 antiarrhythmic properties of chlorthalidopoxide, 272
 nitroglycerin and coronary collateral function, 298
 nitroglycerin and methoxamine reduces severity and extent of MI, 291
 occluded A-V node artery, 772
 rate dependent ventricular ectopia following acute coronary occlusion, 654
 role of vagus nerves in cardiovascular changes induced by, 86
- Coronary ostial stenosis**
 complication of aortic valve replacement, 530
 developmental complex including supra-valvular stenosis of the aorta and pulmonary trunk, 585
- Coronary perfusion**
 versus cold ischemic arrest during aortic valve surgery, 1190
- Coronary resistance**
 isoproterenol and coronary blood flow measurements, 55
- Coronary sinus blood flow**
 perhexiline and coronary responses, 887
- Coronary sinus recordings**
 electrophysiology and surgery for WPW syndrome, 799
- Coronary vein**
 permanent percutaneous atrial pacing from coronary vein, 222

- Coronary venous pathology
 - coronary vessels and conduction system in homocystinuria, 367
- Corrected transposition of great arteries
 - associated ventricular rotation, 574
- Countershock
 - patterns of ventricular activity during catheter defibrillation, 858
- Creatine phosphokinase
 - myocardial balance of inorganic phosphate and enzymes, 283
- Cyanosis
 - ascending aorta to right pulmonary artery anastomosis, 952
- Cycle length
 - effects on cardiac refractory periods in man, 32

D

- Data bank
 - treatment selection in coronary artery disease, 606
- Defibrillation
 - multiple mechanisms of, 858
 - patterns of ventricular activity during catheter defibrillation, 858
- Deslanoside
 - antiarrhythmic properties of chlorthalidopoxide, 272
- Diabetes mellitus
 - insulin, free fatty acids, and glucose response to glucagon following MI, 357
- Diagnostic methods
 - acute rejection in long-term cardiac transplant survivor, 361
 - echocardiography
 - subvalvular aortic stenosis, 226
 - See also Echocardiography; Ultrasound
 - Nomenclature and Criteria for Diagnosis of Diseases of the Heart and Great Vessels, 390
 - ruptured chordae tendineae, 678
 - VCG criteria for diagnosis of inferior MI, 829
- Diastolic events
 - rate of change of LV volume (dV/dt), 739
- Diastolic pressure
 - changes in LV diastolic stiffness and tone during angina pectoris, 255
 - diastolic descent of mitral valve, 246
- Diastolic pressure time index
 - adequacy of subendocardial oxygen delivery, 968
 - subendocardial ischemia evaluation, 978
- Diastolic properties
 - and wall thickness of LV, 129
- Diastolic time intervals
 - influence of heart rate and age in children, 1107
- Diets
 - cardiovascular disease in tribal societies, 1132
 - What You Need to Know about Food and Cooking for Health (Lamb), 386
- Digitalis
 - antiarrhythmic effect of chlorthalidopoxide, 272
 - bioavailability of drugs: focus on digoxin, 391
 - comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
 - comparison of serum digoxin level measurement with acetyl strophanthidin tolerance testing, 1053
 - contractile response in normal subjects, 517
 - digoxin levels during cardiopulmonary bypass in children, 1047
 - exercise stress test in documented coronary artery disease, 348
 - impaired LV function in alcoholic cirrhosis with ascites, 755
 - variation in biologic availability for different tablets of digoxin, 395
- Digoxin
 - bioavailability of drugs, 391
 - effect of FDA action, 399
 - comparison of serum digoxin level measurement with acetyl strophanthidin tolerance testing, 1053
 - educating physicians, pharmacists and patients about change in digoxin bioavailability, 399
 - levels during cardiopulmonary bypass in children, 1047
 - removal of poorly absorbed tablet preparations from the market by FDA, 399
 - setting regulatory standards for digoxin bioavailability, 395
- Discrete subaortic stenosis
 - echocardiographic findings, 226
 - ultrasound in IHSS and LV outflow obstruction, 673

- Discriminant analysis
 - posthospital phase of MI, 460
- Double outlet right ventricle
 - Taussig-Bing heart with mitral valve straddling, 761
- Drugs
 - bioavailability of drugs: focus on digoxin, 391
 - Drug Interactions (Hansten), 1260
 - See also under name of drug
- Dyskinesia
 - ECG assessment of ventricular dyssynergy, 447
- Dyssynergy
 - ECG assessment of ventricular dyssynergy, 447

E

- Ebstein's malformation
 - severe congenital tricuspid incompetence in neonates, 962
 - tricuspid valve in, 194
- Eccentricity index
 - ultrasound and bicuspid aortic valve, 870
- Echocardiography
 - A wave of apexcardiogram and LV diastolic stiffness, 441
 - abnormalities in mitral valve prolapse syndrome, 428
 - assessment of LV performance in normal newborns, 232
 - bicuspid aortic valve, 870
 - biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
 - in coexisting hypertrophic subaortic stenosis and fixed LV outflow obstruction, 673
 - congestive cardiomyopathy compared with normal subjects and patients with coronary artery disease, 1153
 - detection of supra-aortic stenosis, 1257
 - diastolic descent of mitral valve, 246
 - discrete subvalvular aortic stenosis, 226, 673
 - effect of inotropic agents on dyskinesia of acutely ischemic myocardium, 1038
 - effect of isometric exercise on LV volume in normal man, 1185
 - endocardial cushion defects, 418
 - exploratory "scanning" in diagnosis of ruptured chordae tendineae, 678
 - left bundle branch block, 423, 876
 - LV volume changes after amyl nitrite and nitroglycerin, 136
 - Lillehei-Kaster mitral valve prosthesis, 434
 - mitral valve prolapse, 595, 780
 - in normal newborns, 1266
 - paradoxical motion of interventricular septum in LBBB, 423
 - right sinus of Valsalva aneurysm, 768
 - sector scanner for real time two-dimensional echocardiography, 1147
 - size of reproductions of echocardiograms, 1022
 - of stented fascia lata grafts in mitral position, 237
 - strip chart vs. polaroid echocardiograms, 1019
 - wall thickness and diastolic properties of LV, 129
- Edema, pulmonary. See Pulmonary edema
- Ejection fraction
 - epinephrine ventriculogram, 1063
 - myocardial function after bypass surgery, 467
- Ejection phase contractile indices
 - comparison of isovolumic indices of myocardial performance and, 1088
- Ejection time index
 - cardiac responses to sitting and supine isometric exercises, 905
- Electrical alternans
 - with lowering of heart rate in massive pericardial effusion, 1254
- Electrical stimulation
 - observations on ventricular tachycardia as studied by, 647
- Electrocardiography
 - aberrant conduction, cycle length and cardiac refractory periods, 32
 - assessment of ventricular dyssynergy, 447
 - A-V conduction in incomplete endocardial cushion defect, 631
 - balloon tipped catheter for His bundle electrograms, 42
 - comparison of transmural and nontransmural AMI, 498
 - computer diagnosis
 - angina pectoris from "maximal" QRS surface waveform information at rest, 1212
 - biventricular hypertrophy, 1223
 - LV hypertrophy patterns and prognosis, 862
 - maximum treadmill exercise tests in abnormal control ECG, 667

- missing waveform information in orthogonal ECG (Frank leads), 1212
 - computer diagnosis of angina pectoris, 1212
 - computer diagnosis of biventricular hypertrophy, 1223
 - paradoxical motion of interventricular septum in LBBB, 423
 - patterns of ventricular activity during catheter fibrillation, 858
 - selective coronary arteriography in young men, 1122
 - significance of second degree A-V block and BBB, 638
 - single ventricle with transposition, 994
 - ST segment, prognostic value of ST elevation, 1262
 - subendocardial ischemia evaluation in valvar aortic stenosis in children, 978
 - VCG criteria for diagnosis of inferior MI, 829
 - Electrodes**
 - transvenous, transmediastinal, and transthoracic ventricular pacing, 407
 - Electrolyte disturbances**
 - relation to arrhythmias, 193
 - Electromagnetic flowmeter**
 - blood flow during forearm exercises, 535
 - Electrophysiology**
 - A-V conduction system in congenital heart disease, 1232
 - cycle length and cardiac refractory periods, 32
 - effects of lidocaine on intraventricular conduction defects, 894
 - effects of procaine amide on IV conduction, 522
 - Mathematical Physiology: Blood Flow in Electrically Active Cells* (Leiberstein) 385
 - postoperative conduction disturbances after ventricular septal defect and tetralogy of Fallot, 214
 - properties of accessory pathways, 1200
 - significance of second degree of A-B block and BBB, 638
 - split His bundle potentials, 615
 - surgical treatment of WPW syndrome, 206, 799
 - Embolism**
 - complication of coronary arteriography, 599
 - experimental pulmonary embolism: effect on pulmonary blood volume and vascular compliance, 152
 - incorporation of radiolabelled fibrinogen into venous thrombi induced in dogs, 158
 - thrombotic calcific mitral stenosis: morphology of calcific mitral valve, 1167
 - Endocardial cushion defect**
 - A-V conduction in patients with incomplete endocardial cushion defect, 631
 - echocardiographic features, 418
 - tetralogy of Fallot and, 173
 - Endocardial pacing**
 - ventricular pacing, 407
 - Endomyocardial biopsy**
 - acute rejection in long-term cardiac transplant survivor, 361
 - Enzymes**
 - myocardial balance of inorganic phosphate and enzymes, 283
 - Epicardial pacing**
 - ventricular pacing, 407
 - Epidemiology**
 - cardiovascular disease in six Solomon Islands tribal societies, 1132
 - LV hypertrophy patterns and prognosis, 862
 - prehospital ventricular fibrillation and sudden death, 790
 - Epinephrine**
 - ventriculograms, 1063
 - Erythema marginatum**
 - childhood rheumatic fever in North India, 7
 - Erythrocytes**
 - effect of propranolol on oxygen binding to hemoglobin, 881
 - Escape beats**
 - relationship of automaticity and depressed conduction, 818
 - Ethanol**
 - acute effects on left ventricular performance, 124
 - Excitation-contraction coupling**
 - inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
 - Exercise tests and testing**
 - in angiographically documented coronary artery disease, 348
 - antiarrhythmic drug therapy for sporadic ventricular ectopic arrhythmias, 659
 - cardiac responses to sitting and supine isometric exercises, 905
 - comparison of hemodynamic effects of isoproterenol and, in pulmonary valvar stenosis, 948
 - in coronary artery disease, 1267
 - coronary heart disease prevention, 594
 - effect of carbon monoxide exposure on intermittent claudication, 415
 - effect of posture on, 594
 - effects on left ventricular ejection time, 195
 - Exercise Testing and Training in Coronary Heart Disease* (Detry), 591
 - forearm blood flow measurements, 535
 - functional aerobic impairment in coronary heart disease, 696
 - hemodynamics in children with pulmonary stenosis, 1102
 - isometric
 - cardiac responses: comparative effects with different postures, 905
 - effect on LV volume in normal man, 1185
 - LV function and coronary artery anatomy before and after MI, 47
 - marathon running, 594
 - maximum treadmill test in patients with abnormal control ECG, 667
 - potassium-43 myocardial imaging for noninvasive evaluation of aortocoronary bypass surgery, 688
 - reproduction of maximal exercise performance in angina pectoris despite ouabain treatment, 309
 - treadmill testing
 - functional aerobic impairment in coronary heart disease, 696
 - Extraction ratios**
 - total and nutritional blood flow in dogs, 338
- F**
- Fascia lata grafts**
 - echocardiographic studies of stented fascia lata grafts in mitral position, 237
 - Fascicles**
 - relationships between increased automaticity and depressed conduction, 818
 - Fibrillation threshold**
 - comparative antiarrhythmic actions of lidocaine and methyl lidocaine, 264
 - Fibrinogen**
 - incorporation of radiolabelled fibrinogen into venous thrombi induced in dogs, 158
 - thrombosis and AMI, 1262
 - Fibrosis**
 - rest and exercise hemodynamics in children with pulmonary stenosis, 1102
 - Floppy valve syndrome**
 - mitral valve prolapse syndrome, 428
 - Flowmeters**
 - comparison of blood flow measured by plethysmograph and, during forearm exercises, 535
 - Fluid infusion**
 - plasma volume in shock with AMI, 98
 - Follow-up studies**
 - ascending aorta to right pulmonary artery anastomosis, 952
 - coronary bypass grafting, 1021
 - intracardiac repair in tetralogy of Fallot, 958
 - selective coronary arteriography in young men, 1122
 - treatment selection in coronary artery disease, 606
 - Force-velocity relations**
 - comparison of isovolumic and ejection phase indices of myocardial performance, 1088
 - Forearm blood flow**
 - measurement of, 535
 - Framingham (Mass.) study**
 - vital capacity and congestive heart failure, 1160
 - Free fatty acids**
 - response to glucagon following MI, 357
- G**
- Gap phenomena**
 - during retrograde conduction, 811
 - unmasking and conversion of, 624
 - Gas endarterectomy**
 - of right coronary artery, 63
 - Glucagon**
 - insulin, free fatty acids, and glucose response to intravenous glucagon following MI, 357
 - Glucose**
 - response to glucagon following MI, 357

- Glucose, potassium and insulin infusion**
ineffectiveness during pacing stress in chronic ischemic heart disease, 1028
- Glutamic oxaloacetic transaminase**
myocardial balance of inorganic phosphate and enzymes, 283
- Glycosides**
comparison of serum digoxin level measurement with acetyl strophanthidin tolerance testing, 1053
contractile response to commonly used digitalis glycosides in normal subjects, 517
- Grafts and grafting**
acute rejection in long-term cardiac transplant survivors, 361
coronary bypass grafts, 63
nitroglycerin and coronary collateral function, 298
discrepancies between cineangiographic and postmortem findings, 702
echocardiographic studies of stented fascia lata grafts in mitral position, 237
gas endarterectomy of right coronary artery importance of proximal bypass graft, 63
saphenous vein
deterioration of myocardial function following bypass surgery, 467
gas endarterectomy of right coronary artery: importance of proximal bypass graft, 63
left main coronary artery stenosis: results of coronary bypass surgery, 68
long-term follow-up, 77
myocardial function after bypass surgery, 467
selecting patients for coronary bypass grafting, 1021

H

- Heart block**
bilateral bundle branch block, 848
effects of lidocaine on intraventricular conduction defects, 894
intra-His bundle block, 837
left bundle branch block. *See* Left bundle branch block
occluded A-V node artery, 772
pathophysiologic correlations in split His bundle potentials, 615
postoperative conduction disturbances after ventricular septal defect and tetralogy of Fallot, 214
significance of second degree A-V block and BBB, 638
transvenous, transmediastinal, and transthoracic ventricular pacing, 407
- Heart rate**
augmentation of electrical alternans with lowering of heart rate in massive pericardial effusion, 1254
cardiac responses to sitting and supine isometric exercises, 905
influence of age and heart rate on systolic and diastolic time intervals, 1107
optimal antiarrhythmic heart rate, 654
role of vagus nerves, 86
- Heart-reactive antibody**
postpericardiotomy syndrome and antiheart antibodies, 301
- Heart scan**
potassium-43 myocardial imaging for noninvasive evaluation of aortocoronary bypass surgery, 688
- Heart sounds**
fourth heart sound, 4, 1263
apexcardiogram and LV distolic stiffness, 441
sound pressure correlates of second heart sound, 316
- Hemodynamic studies**
epinephrine ventriculogram, 1063
exercise and isoproterenol in pulmonary valvar stenosis, 948
lung water in patients with AMI, 115
metabolic and hemodynamic effects of prolonged bed rest in normal subjects, 551
plasma volume expansion and prognostic implications in AMI, 106
pulmonary stenosis in children, 1102
rest and exercise studies in children with pulmonary stenosis, 1102
- Hemoglobin-oxygen dissociation**
effect of propranolol, 881
- Hemophilia**
The Management of Musculo-skeletal Problems in the Haemophilias (Duthie, Matthews, Rizza and Steel), 385
- Heparin**
biochemical mechanism of anticoagulant action, 603
- Herrick, James B. Award**
Award Acceptance by Dr. Allan L. Friedlich on behalf of Dr. Paul Dudley White, 203
- Heymans, Corneel**
Corneel Heymans: A Collective Biography (De Schaepestryver, ed.), 1260
- His-AV nodal pathway**
ventriculo-atrial conduction in WPW syndrome, 22
- His bundle**
A-V conduction system in congenital heart disease, 1232
intra-His bundle block, 837
- His bundle electrocardiography**
effects of procaine amide on IV conduction, 522
electrophysiology and surgery for WPW syndrome, 799
- His bundle electrograms**
atrial echo beats, 805
A-V conduction in incomplete endocardial cushion defect, 631
A-V conduction system in congenital heart disease, 1232
balloon tipped catheter for obtaining, without fluoroscopy, 42
bilateral bundle branch block, 848
catheter-induced intra-Hisian and intrafascicular block during, 579
cycle length and cardiac refractory periods, 32
effects of lidocaine on intraventricular conduction defects, 894
postoperative conduction disturbances after ventricular septal defect and tetralogy of Fallot, 214
significance of second degree A-V block and BBB, 638
- His bundle potentials**
pathophysiologic correlations in split His bundle potentials, 615
- His bundle studies**
L'Activité du Faisceau de His Normale et Pathologique (Puech and Grolleau), 592
- His-Purkinje system**
atrial echo beats, 805
conduction disorders following AMI
bilateral bundle branch block, 848
intra-His bundle block, 837
conduction disorders in canine proximal His-Purkinje system after myocardial ischemia, 837
gap phenomena during retrograde conduction, 811
unmasking and conversion of gap phenomenon, 624
Wenckebach periods and, 596
- Holmes' heart**
common (single) ventricle with normally related great vessels, 565
- Homocystinuria**
coronary vessels and conduction system, 367
- Hospitals**
results of saphenous vein graft surgery in a community hospital, 334
- Hydraulic output power**
circumferential fiber shortening and tension, 925
- Hyperlipidemias**
coronary calcification detected by fluoroscopy, 1247
Xanthoma Formation and Other Tissue Reactions to Hyperlipemias (Braun-Falco, Keller and Zollner, ed.), 593
- Hyperlipoproteinemia**
familial type II and coronary artery disease, 476
- Hypertension**
coronary calcification detected by fluoroscopy, 1247
Criteria for Evaluation of Automated Blood Pressure Measuring Devices for Use in Hypertensive Screening Programs.
Page 6 at back at March 1974 issue
- Hypertensive pulmonary vascular disease**
surgical correction of truncus arteriosus, 144
- Hypertrophic obstructive cardiomyopathy**
ultrasound in IHSS and LV outflow obstruction, 673
- Hypertrophic subaortic stenosis**
echocardiography in fixed LV outflow obstruction with, 673
- Hypertrophy**
biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
computer diagnosis of biventricular, from "maximal" surface waveform information, 1223
LV hypertrophy patterns and prognosis, 862
- Hypokinesia**
ECG assessment of ventricular dyssynergy, 447
- Hypovolemia**
plasma volume in shock with AMI, 98

I

- Idiopathic hypertrophic subaortic stenosis**
 - biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
 - echocardiographic findings in discrete subvalvular aortic stenosis, 226
 - ultrasound in IHSS and LV outflow obstruction, 673
- Immunofluorescence technique**
 - Chagasic cardiopathy, 13
 - postpericardiotomy syndrome and antiheart antibodies, 401
- Immunology**
 - Chagasic cardiopathy, 13
 - postpericardiotomy syndrome and antiheart antibodies, 401
- Immunosuppression**
 - acute rejection in long-term cardiac transplant survivor, 361
- Incomplete endocardial cushion defect**
 - A-V conduction, 631
- India**
 - acute attacks of rheumatic fever during childhood in North India, 7
 - intracardiac repair of tetralogy of Fallot, 958
- Inotropic agents**
 - effect on dyskinesia of acutely ischemic myocardium, 1038
 - effects of calcium ionophore X-537A in dogs, 1072
 - epinephrine ventriculogram, 1063
- Inotropic state**
 - comparison of isovolumic and ejection phase indices of myocardial performance, 1088
- Insulin**
 - response to glucagon following MI, 357
- Inter-Society Commission for Heart Disease Resources (ICHD)**
 - cardiovascular diseases-guidelines for prevention and care resources, 387
 - Community Resources for Rehabilitation of Patients with Chronic Obstructive Pulmonary Diseases and Cor Pulmonale, A-1
 - community resources, A-4
 - rehabilitation of patients with chronic obstructive pulmonary disease and cor pulmonale, A-1
 - behavioral considerations, A-3
 - community resources, A-4
 - community hospital respiratory rehabilitation units, A-5
 - levels of care, A-5
 - patient identification, A-4
 - planning, A-4
 - primary physicians, A-5
 - regional reference centers, A-6
 - daily bronchial hygiene, A-2
 - oxygen administration, A-3
 - patient and family education, A-1
 - pharmacological measures, A-3
 - physical reconditioning, A-3
 - principles of, A-1
 - treatment and prevention of infection, A-2
 - vocational rehabilitation, A-4
- Intermittent claudication**
 - effect of carbon monoxide exposure on, 415
- Intraventricular conduction defects**
 - effects of lidocaine, 894
- Interventricular septal motion**
 - in LBBB, 423
- Interventricular septum**
 - biventricular cineangiography in evaluation of asymmetric septal hypertrophy, 1116
- Ionophores**
 - inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
- Ischemia, myocardial**
 - analysis of segmental ischemic dysfunction utilizing pressure-length loop, 748
 - beneficial effects of vagal stimulation and bradycardia, 943
 - effect of inotropic agents on dyskinesia, 1038
 - epinephrine ventriculogram, 1063
 - evaluation of subendocardial ischemia in valvar aortic stenosis in children, 978
 - LV subendocardial ischemia in severe valvar and supraventricular aortic stenosis, 326
 - myocardial balance of inorganic phosphate and enzymes, 283
 - perhexiline and coronary responses, 887

Ischemic heart disease

- bilateral bundle branch block, 848
- changes in LV diastolic stiffness and tone during angina pectoris, 255
- coronary calcification detected by fluoroscopy, 1247
- coronary thrombosis and, 1
- exercise stress tests in angiographically documented coronary artery disease, 348
- ineffectiveness of glucose, potassium, and insulin infusion, 1028
- intra-His bundle block, 837
- natural history in relation to arteriographic findings, 489
- reproduction of maximal exercise performance in angina pectoris despite ouabain treatment, 309
- response to glucagon following MI, 357
- Isoenzymes**
 - coronary perfusion vs. cold ischemic arrest in aortic valve surgery, 1190
- Isometric exercises**
 - cardiac responses: comparative effects with different postures, 905
 - effect of handgrip exercise on LV volume in normal men, 1185
- Isoproterenol**
 - differentiation of coronary artery lesions by coronary blood flow measurements during isoproterenol infusion, 55
 - exercise and, in pulmonary valvar stenosis, 948
 - relationships between automaticity and conduction, 818
 - total and nutritional blood flow in dogs, 338
- Isovolumic contraction time**
 - cardiac responses to sitting and supine isometric exercises, 905
 - comparison of ejection phase indices of myocardial performance and, 1088
 - thyrotoxicosis and short cardiac PEP, 900

K

Kent bundle

- surgical correction of Wolff-Parkinson-White syndrome (type A), 206

L

Lactate

- myocardial balance of inorganic phosphate and enzymes, 283
- myocardial lactate metabolism, propranolol in treatment of AMI, 1078
- perhexiline and coronary responses, 887
- Lactic acidosis**
 - plasma volume in shock with AMI, 98
- Left axis deviation**
 - A-V conduction in incomplete endocardial cushion defect, 631
- Left bundle branch block**
 - catheter-induced intra-Hisian and intra-fascicular block during His bundle electrograms, 579
 - echocardiographic manifestations, 876
 - paradoxical motion of interventricular septum in LBBB, 423
- Left-sided obstructive anomalies**
 - atrial septal defect and, 1005
- Left ventricle**
 - compliance
 - changes in LV diastolic stiffness and tone during angina, 255
 - diastolic descent of mitral valve, 246
 - coronary artery anatomy and LV function before and after MI, 47
 - diastolic pressure-volume relations
 - diastolic descent of mitral valve, 246
 - diastolic stiffness
 - A wave of apexcardiogram and, 441
 - changes in LV tone and, during angina pectoris, 255
 - diastolic descent of mitral valve, 246
 - dysfunction
 - effects of plasma volume expansion in AMI, 106
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
 - ejection rate
 - rate of change of LV volume, 729
 - diastolic events, 739
 - validation and peak systolic ejection rate, 729
 - ejection time (LVET)
 - cardiac responses to sitting and supine isometric exercises, 905
 - effects of exercise on, 195

- ECC assessment of ventricular dyssynergy, 447
- end-diastolic pressure
- ineffectiveness of GKI infusion in chronic ischemic heart disease, 1028
 - myocardial balance of inorganic phosphate and enzymes, 283
 - wall thickness and diastolic properties of LV, 129
- end-diastolic volume
- effect of isometric exercise on LV volume in normal man, 1185
- hypertrophy
- apexcardiogram and LV diastolic stiffness, 441
 - diastolic descent of mitral valve, 246
 - patterns and prognosis, 862
 - wall thickness and diastolic properties of LV, 129
- outflow obstruction
- echocardiographic detection of supravalvular aortic stenosis, 1257
 - echocardiography in hypertrophic subaortic stenosis and, 673
- performance
- circumferential fiber shortening and tension, 925
 - echocardiographic assessment in normal newborns, 232
 - following direct myocardial revascularization, 780
 - impaired in alcoholic cirrhosis with ascites, 755
- pressure-volume relations
- apexcardiograms and LV diastolic stiffness, 441
 - rate of change of LV volume
 - diastolic events, 739
 - validation and peak systolic ejection rate in health and disease, 729
- selective coronary arteriography in young men: follow-up study, 1122
- volume changes after amyl nitrite and nitroglycerin as measured by ultrasound, 136
- wall motion
- augmentation of LV contraction pattern in coronary artery disease by inotropic catecholamine, 1063
 - echocardiographic features of congestive cardiomyopathy and coronary artery disease, 1153
 - effects of nitroglycerin on, in coronary artery disease, 682
 - wall thickness and diastolic properties, 129
- Lenegre's disease**
- significance of second degree A-V block and BBB, 638
- Lev's disease**
- significance of second degree A-V block and BBB, 638
- Lidocaine**
- antiarrhythmic effect of chlorthalidopoxide, 272
 - comparative antiarrhythmic actions of methyl lidocaine and, 264
 - electrophysiologic effects on intraventricular conduction defects, 894
 - relation of automaticity and conduction, 818
- Lillehei-Kaster mitral valve prostheses**
- echocardiographic and phonocardiographic characteristics, 434
- Longitudinal dissociation**
- bilateral bundle branch block, 848
- Lung water**
- in patients with AMI, 115
- Lungs**
- pulmonary diffusing capacity in disorders of pulmonary circulation, 541
- ## M
- Macroembolism**
- experimental pulmonary embolism, 152
- Manometer systems**
- analysis and correction of pressure wave distortion in fluid-filled catheter system, 165
- Mediastinal lymphadenopathy**
- pulmonary varix and, 1011
- Medical resource planning**
- cardiovascular diseases — guidelines for prevention and care resources: ICHD reports, 387
- Metabolism**
- hemodynamic and metabolic effects of prolonged bed rest in normal subjects, 551
- Methoxamine**
- and nitroglycerin for MI, 291
- Methyl lidocaine**
- comparative antiarrhythmic actions of lidocaine and, 264
- Microembolism**
- experimental pulmonary embolism, 152
- Microspheres**
- adequacy of subendocardial oxygen delivery, 968
- Midsystolic click-late systolic murmur**
- mitral valve prolapse syndrome, 428
- Minnesota code**
- LV hypertrophy patterns and prognosis, 862
- Mitral regurgitation**
- coarctation of the aorta with congenital mitral regurgitation, 1175
 - due to prolapse of posterior mitral valve leaflet, 1267
 - echocardiographic abnormalities in mitral valve prolapse syndrome, 428
 - "scanning" in echocardiographic diagnosis of ruptured chordae tendineae, 678
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
- Mitral stenosis**
- atrial fibrillation and, 1019
 - congenital mitral valve disease associated with coarctation of the aorta, 985
 - natural course, 1167
 - thrombotic calcific, 1167
- Mitral valve**
- echocardiography of mitral valve prolapse, 595
 - leaflet prolapse, "scanning" in echocardiographic diagnosis of ruptured chordae tendineae, 678
 - left bundle branch block, 876
 - Lillehei-Kaster prosthesis, echocardiographic and phonocardiographic characteristics, 434
 - morphology of calcific, 1167
 - parachute deformity of, 985
 - prolapse, 1267
 - echocardiogram of, 428, 595, 780
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
 - quantitation of left-to-right shunts, 512
 - reduction in rate of diastolic descent of mitral valve echogram in altered LV diastolic pressure-volume relations, 246
 - replacement
 - coarctation of the aorta with congenital mitral regurgitation, 1175
 - echocardiographic studies of stented fascia lata grafts in mitral position, 237
 - Taussig-Bing heart with mitral valve straddling, 761
- Mitral valve prolapse syndrome, 1267**
- echocardiographic abnormalities, 428, 595, 780
- Mobitz block**
- significance of second degree A-V block and BBB, 638
- Mobitz type II block**
- bilateral bundle branch block, 848
 - intra-His bundle block, 837
- Models**
- for studying antiarrhythmic drugs, 818
- Monitoring**
- antiarrhythmic drug therapy for sporadic ventricular ectopic arrhythmias, 659
- Morphology**
- calcific mitral valve, 1167
- Mortality**
- bypass surgery in a community hospital, 334
 - intracardiac repair in tetralogy of Fallot, 958
 - LV hypertrophy patterns and prognosis, 862
- Multivariate analysis**
- computer diagnosis of angina pectoris from "maximal" QRS surface waveform information at rest, 1212
 - computer diagnosis of biventricular hypertrophy from "maximal" surface waveform information, 1223
 - LV hypertrophy patterns and prognosis, 862
 - long-term follow-up of saphenous vein bypass surgery, 77
- Murmur**
- midsystolic click-late systolic murmur, 428
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
- Muscle metabolism**
- comparison of blood flow measured by plethysmograph and flowmeters during forearm exercises, 535
- Myocardial infarction**
- beneficial effects of vagal stimulation and bradycardia during experimental acute myocardial ischemia, 943
 - bypass surgery in a community hospital, 334
 - chronic recurrent ventricular tachycardia and ventricular tachycardia during AMI, 647

- comparison of transmural and nontransmural AMI, 498
- congestive cardiomyopathy compared with coronary artery disease, 1153
- coronary artery disease and type II hyperlipoproteinemia, 476
- coronary thrombosis and fatal myocardial ischemia, 1
- ECG assessment of ventricular dyssynergy, 447
- inferior, VCG criteria for diagnosis of, 829
- insulin, free fatty acids, and glucose response to intravenous glucagon following MI, 357
- LV function and coronary artery anatomy before and after MI, 47
- lung water in patients with AMI, 115
- necropsy studies in MI without occlusion due to atherosclerosis, 1127
- observations on ventricular tachycardia as studied by electrical stimulation, 647
- optimal antiarrhythmic heart rate, 654
- plasma volume
 - hemodynamic effects of plasma volume expansion and prognostic implications in AMI, 106
 - prior to and following volume loading during shock with AMI, 98
- posthospital phase: identification of patients with increased mortality risk, 460
- postinfarction ventricular septal rupture, 455
- prognosis
 - effects of plasma volume expansion in AMI, 106
 - value of ST elevation, 1262
- propranolol in treatment of AMI, 1078
- reduction in severity and extent of MI when nitroglycerin and methoxamine are administered during coronary occlusion, 291
- saphenous vein bypass surgery, long-term follow-up, 77
- thrombosis and AMI, 1262
- Myocardial ischemia**
 - beneficial effects of vagal stimulation and bradycardia, 943
 - conduction disorders in canine proximal His-Purkinje system following acute myocardial ischemia, 837
 - bilateral bundle branch block, 848
 - intra-His bundle block, 837
 - effect of inotropic agents on dyskinesia, 1038
 - effects of nitroglycerin on LV wall motion in coronary artery disease, 682
 - myocardial balance of inorganic phosphate and enzymes, 283
 - nitroglycerin and intraoperative coronary collateral function in patients with coronary occlusive disease, 298
 - nitroglycerin and methoxamine administered during coronary occlusion, 291
 - perhexiline and coronary responses, 887
 - segmental ischemic dysfunction, 748
- Myocarditis**
 - occluded A-V node artery, 772
- Myocardium**
 - acute effects of ethanol on LV performance, 124
 - blood flow and oxygen consumption after valve replacement, 933
 - contractility
 - circumferential fiber shortening and tension, 925
 - inotropic effects of calcium ionophore X-537A in anesthetized dog, 1072
 - fibrosis
 - rest and exercise hemodynamics in children with pulmonary stenosis, 1102
 - function
 - changes in LV diastolic stiffness and tone during angina, 255
 - deterioration following bypass surgery, 467
 - infarction. *See* Myocardial infarction
 - ischemia. *See* Myocardial ischemia
 - lactate metabolism
 - ineffectiveness of GKI infusion in chronic ischemic heart disease, 1028
 - propranolol in treatment of AMI, 1078
 - The Myocardial Cell for the Clinical Cardiologist* (Legato), 1013
 - oxygen consumption
 - adequacy of myocardial oxygen delivery, 958
 - LV volume changes after amyl nitrate and nitroglycerin as measured by ultrasound, 136
 - performance, comparison of isovolumic and ejection phase indices, 1088
 - perhexiline and coronary responses, 887
 - revascularization
 - LV performance following direct myocardial revascularization, 780
 - myocardial function after bypass surgery, 467
 - potassium-43 myocardial imaging, 688
 - supply-demand relationship, 326
- N**
- Natural history**
 - aneurysms of membranous ventricular septum in childhood, 375
 - ischemic heart disease, 489
 - LV hypertrophy patterns and prognosis, 862
 - mitral stenosis, 1167
- Necropsy studies**
 - myocardial infarction with minimal or no coronary luminal reduction due to atherosclerosis, 1127
- Nervous system**
 - Neurophysiology Studied in Man: Proceedings of a Symposium Held in Paris at the Faculté des Sciences* (Somjen, ed.), 191
- Nitrates**
 - in prophylactic treatment of angina pectoris, 1015
- Nitroglycerin**
 - effects on LV wall motion in coronary artery disease, 682
 - intraoperative coronary collateral function in patients with coronary occlusive disease, 298
 - LV volume changes after amyl nitrite and, as measured by ultrasound, 136
 - and methoxamine for MI, 291
 - total and nutritional blood flow in dogs, 338
- Nodules**
 - subcutaneous *see* Subcutaneous nodules
- Noninvasive techniques**
 - coronary calcification detected by fluoroscopy, 1247
 - echocardiographic assessment of LV performance in normal newborns, 232
 - effect of isometric exercise on LV volume in normal man, 1185
 - paradoxical motion of interventricular septum in LBBB, 423
 - sector scanner for real time two-dimensional echocardiography, 1147
 - thyrotoxicosis and short cardiac pre-ejection period, 900
 - vital capacity and congestive heart failure, 1160
- Norepinephrine**
 - total and nutritional blood flow in dogs, 338
- Nursing care**
 - Coronary Care* (Goodland), 1260
- O**
- Obstructive anomalies**
 - atrial septal defect and, 1005
- Occlusions**
 - coronary. *See* Coronary occlusion
- Orthostasis**
 - metabolic and hemodynamic effects of bed rest in normal subjects, 551
- Ostium primum atrial septal defect**
 - A-V conduction in incomplete endocardial cushion defect, 631
- Ouabain**
 - ineffectiveness in alcoholic cirrhosis with ascites, 755
 - reproduction of maximal exercise performance in angina pectoris despite ouabain treatment, 309
- Oxygen**
 - adequacy of subendocardial oxygen delivery, 958
 - effect of propranolol on oxygen binding to hemoglobin, 881
 - maximal oxygen uptake
 - functional aerobic impairment in coronary heart disease, 696
 - myocardial oxygen consumption
 - LV volume changes after amyl nitrite and nitroglycerin, 136
 - myocardial blood flow and, after valve replacement, 933
 - perhexiline and coronary responses, 887
 - propranolol in treatment of AMI, 1078
 - rest and exercise hemodynamics in children with pulmonary stenosis, 1102
 - reproduction of maximal exercise performance in angina pectoris despite ouabain treatment, 309
 - systemic arterial oxygen saturation, surgical correction of truncus arteriosus, 144

P

Pacing and pacemakers

- atrial
 - myocardial balance of inorganic phosphate and enzymes, 283
 - permanent percutaneous atrial pacing from coronary vein: long-term follow-up, 222
 - balloon tipped catheter for His bundle electrograms, 42
 - Cardiac Pacing* (Samet, ed.), 591
 - ineffectiveness of glucose, potassium and insulin infusion in chronic ischemic heart disease, 1028
 - role of vagus nerves, 86
 - significance of second degree A-V block and BBB, 638
 - transfemoral cardiac pacing and phlebitis, 1018
- ventricular
 - paradoxical motion of interventricular septum in LBBB, 423
 - transvenous, transmediastinal and transthoracic: comparison after complete two-year follow-up, 407
- Pacing stress test**
 - perhexiline and coronary responses, 887
- Papillary muscles**
 - congenital mitral valve disease associated with coarctation of the aorta, 985
- Parachute mitral valve**
 - congenital mitral valve disease associated with coarctation of the aorta, 985
- Parasitic heart disease**
 - Chagasic cardiopathy, 13
- Paroxysmal A-V block**
 - intra-His bundle block, 837
- Pathophysiology**
 - bilateral bundle branch block, 848
 - intra-His bundle block, 837
 - prehospital ventricular fibrillation and sudden death, 790
 - split His bundle potentials, 615
 - sudden death of two young soldiers, 1239
- Peak systolic dV/dt**
 - rate of change of LV volume, 729
- Peak tension**
 - circumferential fiber shortening and tension, 925
- Pediatric cardiology**
 - Essentials of Pediatric Cardiology* (Moller), 778
 - initial attack of acute rheumatic fever during childhood in North India, 7
 - See also Children and infants
- Perfusion**
 - coronary perfusion vs. cold ischemic arrest during aortic valve surgery, 1190
- Perhexiline**
 - coronary hemodynamic and myocardial metabolic responses, 887
- Pericardial effusion**
 - augmentation of electrical alternans with lowering of heart rate in massive, 1254
- Pericardium**
 - postpericardiotomy syndrome and antiheart antibodies, 401
- Pharmacokinetics**
 - digoxin, 391
 - levels during cardiopulmonary bypass in children, 1047
- Pharmacology**
 - antiarrhythmic agents
 - chlorthalidone, 281
 - lidocaine and methyl lidocaine, 264
 - bioavailability of drugs: focus on digoxin, 391
 - LV volume changes after amyl nitrite and nitroglycerin, 136
- Phlebitis**
 - transfemoral cardiac pacing and, 1018
- Phonocardiography**
 - aneurysm of membranous ventricular septum, 375
 - fourth heart sound, 4, 1263
 - influence of heart rate and age on systolic and diastolic time intervals in children, 1107
 - intracardiac study of second heart sound, 316
 - Lillehei-Kaster mitral valve prosthesis, 434
 - mitral valve prolapse syndrome, 428
- Phosphate compounds**
 - myocardial balance of inorganic phosphate and enzymes: effects of tachycardia and ischemia, 283
- Plasma volume**
 - hemodynamic effects of plasma volume expansion and prognostic implications in AMI, 106
 - lung water in patients with AMI, 115
 - prior to and following volume loading during shock with AMI, 98

Platelet dyscrasia

coronary vessels and conduction system in homocystinuria, 367

Plethysmograph

comparison of blood flow measured by flowmeter and, during forearm exercises, 535

Postpericardiotomy syndrome

antiheart antibodies and, 301

Potassium-43

myocardial imaging for evaluation of aortocoronary bypass surgery, 688

Practolol

electrical alternans with lowering of heart rate in massive pericardial effusion, 1254

Pre-ejection period

cardiac responses to sitting and supine isometric exercises, 905
index to thyrotoxicosis, 900
systolic time intervals in pregnancy, 560

Pre-excitation

electrophysiology and surgery for WPW syndrome, 799
unusual properties of accessory pathways, 1200

Pregnancy

alterations of systolic time intervals, 560

Preload

circumferential fiber shortening and tension, 925

Premature atrial impulses

cycle length and cardiac refractory periods, 32

Pressure-length loop

analysis of segmental ischemic dysfunction, 748

Pressure-rate product

cardiac responses to sitting and supine isometric exercises, 905

Pressure recording systems

analysis and correction of pressure wave distortion in fluid-filled catheter system, 165

Pressure-volume relations

changes in LV diastolic stiffness and tone during angina, 255
diastolic descent of mitral valve, 246

Procaine amide

electrophysiologic effects on intraventricular conduction, 522
for sporadic ventricular ectopic arrhythmias, 659

Prognosis

LV hypertrophy patterns and, 862
posthospital phase of MI, 460
selective coronary arteriography in young men, 1122
treatment selection in coronary artery disease, 606
vital capacity and congestive heart failure: Framingham study, 1160

Propranolol

effect on myocardial oxygenation and hemodynamics, 1078
effect on oxygen binding to hemoglobin, 881

Prostaglandins

experimental pulmonary embolism, 152

Prostheses

aortic valve

coronary perfusion vs. cold ischemic arrest during aortic valve surgery, 1190
Lillehei-Kaster mitral valve, echocardiographic and phonocardiographic characteristics, 434
prevention of prosthetic aortic stenosis by measurement of aortic size from preoperative aortogram, 921

Pulmonary angiography

diagnosis of pulmonary embolism, 179

Pulmonary arteriogram

diagnosis of pulmonary embolism, 179

Pulmonary arteriovenous fistula

pulmonary varix and, 1011

Pulmonary artery

absence of, surgical correction of truncus arteriosus, 144
ascending aorta to right pulmonary artery anastomosis, 952
banding, surgical correction of truncus arteriosus, 144
developmental complex including supravalvular stenosis of the aorta and pulmonary trunk, 585

Pulmonary atresia

systemic-pulmonary shunt surgery in infants, 508
with intact ventricular septum, tricuspid incompetence in neonates, 962

Pulmonary capillary wedge pressure

effects of plasma volume expansion in AMI, 106

Pulmonary circulation

pulmonary diffusing capacity in disorders of, 541

Pulmonary diffusing capacity

in disorders of pulmonary circulation, 541

- Pulmonary edema**
lung water in patients with AMI, 115
- Pulmonary embolism**
diagnosis, chest radiography, lung scanning and selective pulmonary angiography, 179
experimental, effect on pulmonary blood volume and vascular compliance, 152
incorporation of radiolabelled fibrinogen into venous thrombi induced in dogs, 158
- Pulmonary extravascular water volume**
lung water in patients with AMI, 115
- Pulmonary hypertension**
intracardiac study of second heart sound, 316
- Pulmonary rehabilitation, Inter-Society report, A-1**
community resources, A-1, A-4
community hospital respiratory rehabilitation, A-5
community planning, A-4
levels of care, A-5
patient identification, A-4
primary physicians, A-5
regional reference centers, A-6
concepts of rehabilitation, A-1
principles of, A-1
behavioral considerations, A-3
breathing retraining, A-3
daily bronchial hygiene, A-2
oxygen administration, A-3
patient and family education, A-1
pharmacological measures, A-3
physical reconditioning, A-3
treatment and prevention of infection, A-2
vocational rehabilitation, A-4
- Pulmonary Rehabilitation Program of Gundersen Clinic, La Crosse, Wisconsin, A-13**
- Pulmonary Rehabilitation Program of the University of Alabama and the Spain Rehabilitation Center, A-16**
- Respiratory Care Service Program, Boulder, Colorado, A-7**
- Pulmonary stenosis**
common (single) ventricle with normally related great vessels, 565
comparison of hemodynamic effects of exercise and isoproterenol in, 948
corrected transposition of great arteries and associated ventricular rotation, 574
right atrial volume measurements, 709
and ventricular septal defect, conditions simulating tetralogy of Fallot, 173
- Pulmonary valve**
exercise and isoproterenol in pulmonary valvar stenosis, 948
- Pulmonary valvotomy**
rest and exercise hemodynamics in children with pulmonary stenosis, 1102
- Pulmonary vascular resistance**
surgical correction of truncus arteriosus, 144
- Pulmonary vein**
partial anomalous pulmonary venous return, quantitation of left-to-right shunts, 512
pulmonary varix: diagnostic pitfall, 1011
- Pulmonary wedge pressure**
lung water in patients with AMI, 115
- Pulse-echo ultrasound**
sector scanner for real time two-dimensional echocardiography, 1147
- Pulse transmission time**
cardiac responses to sitting and supine isometric exercises, 905
- Purkinje fibers**
relationships between automaticity and conduction, 818
See also His-Purkinje system
- Purkinje myocardial junction**
gap phenomena during retrograde conduction, 811

Q

- Q waves**
abnormal, coronary artery disease and type II hyperlipoproteinemia, 476
- QRS complex**
computer diagnosis of angina pectoris from "maximal" QRS surface waveform information at rest, 1212
VCG criteria for diagnosis of inferior MI, 829

- Quinidine**
for sporadic ventricular ectopic arrhythmias, 659

R

- Radioactive microspheres**
subendocardial ischemia in valvular and supraventricular aortic stenosis, 326
total and nutritional blood flow in dogs, 338
- Radioisotope techniques**
diagnosis of pulmonary embolism, 179
incorporation of radiolabelled fibrinogen into venous thrombi induced in dogs, 158
lung water in patients with AMI, 115
potassium-43 myocardial imaging, 688
- Radiology**
coronary calcification detected by fluoroscopy, 1247
diagnosis of pulmonary embolism, 179
natural history of aneurysm of membranous ventricular septum in childhood, 375
pulmonary varix: diagnostic pitfall, 1011
- Radionuclide angiography**
quantitation of left-to-right cardiac shunts, 512
- Rastelli operation**
surgical correction of truncus arteriosus, 144
- Rate of change of LV volume (dV/dt)**
diastolic events in health and disease, 739
validation and peak systolic ejection rate in health and disease, 729
- Receptors**
selectivity in beta-adrenergic responses: clinical implications, 783
- Reciprocation**
atrial echo beats, 805
- Rectilinear scanner**
potassium-43 myocardial imaging, 688
- Red blood cells**
effect of propranolol on oxygen binding to hemoglobin, 881
- Re-entry**
atrial echo beats, 805
A-V nodal Wenckebach cycles and, 197
observations on ventricular tachycardia, 647
unusual properties of accessory pathways, 1200
ventriculo-atrial conduction in WPW syndrome, 22
- Refractory periods**
effects on cycle length on cardiac refractory periods in man, 32
retrograde, gap phenomena, 811
unusual properties of accessory pathways, 1200
- Regional coronary blood flow**
adequacy of myocardial oxygen delivery, 968
- Rehabilitation, pulmonary. *See* Pulmonary rehabilitation**
- Rejection**
acute rejection in long-term cardiac transplant survivor, 361
- Reperfusion**
segmental ischemic dysfunction, 748
- Respiratory rehabilitation, A-5**
See also Pulmonary rehabilitation
- Resuscitation**
prehospital ventricular fibrillation and sudden death, 790
- Retrograde gap**
unusual properties of accessory pathways, 1200
- Retrograde refractory periods**
gap phenomena, 811
- Rheumatic fever**
acute attacks during childhood in North India, 7
- Right bundle branch**
A-V conduction system in congenital heart disease, 1232
- Right-sided obstructive anomalies**
atrial septal defect and, 1005
- Right sinus of Valsalva aneurysm**
ultrasound in, 768
- Right ventricle**
end-diastolic pressure, rest and exercise hemodynamics in children with pulmonary stenosis, 1102
hemodynamics in children with pulmonary stenosis, 1102
paradoxical motion of interventricular septum in LBBB, 423
volume overload, ultrasound and LBBB, 876
- Risk factors**
cardiovascular disease in six Solomon Islands tribal societies, 1132

coronary artery disease and type II hyperlipoproteinemia, 476
 LV hypertrophy patterns and prognosis, 862
 vital capacity and congestive heart failure: Framingham study, 1160

Rubidium-86

total and nutritional blood flow in dogs, 338

S

Salt intake

cardiovascular disease in tribal societies, 1132

Saphenous vein graft

deterioration of myocardial function following bypass surgery, 467

gas endarterectomy of right coronary artery: importance of proximal bypass graft, 63

left main coronary artery stenosis: results of coronary bypass surgery, 68

long-term follow-up, 77

Segmental contractility

myocardial function after bypass surgery, 467

Segmental ischemic dysfunction

analysis utilizing pressure-length loop, 748

Segmental motion abnormality

inotropic agents and dyskinesia, 1038

Segmental shortening

syndrome of systolic click, murmur, and mitral valve prolapse, 717

Shock

complicating AMI, plasma volume prior to and following volume loading, 98

coronary thrombosis and fatal myocardial ischemia, 1

Shock (Shires, Carrieco and Canizaro), 778

Shunts

aorto-pulmonary

ascending aorta to right pulmonary artery anastomosis, 952

systemic-pulmonary arterial shunts in infants, 508

left-to-right

atrial septal defect and, 1005

quantitation with radionuclide angiography, 512

Sickle Cell disease

Sickle Cell Hemoglobin: Molecule to Man (Murayama and Nalbandian), 189

Single test stimulus method

ventriculo-atrial conduction in WPW syndrome, 22

Single (common) ventricle

with normally related great vessels, 565

with transposition of the great vessels, 994

Sinus bradycardia

permanent pervenous atrial pacing, 222

Sinus node

coronary vessels and conduction system in homocystinuria, 367

Solomon Islands

antecedents of cardiovascular disease in six Solomon Islands societies, 1132

ST-segments

maximum treadmill exercise tests in abnormal control ECG, 667

myocardial balance of inorganic phosphate and enzymes, 283

prognostic value of ST elevation, 1262

Starling curve

segmental ischemic dysfunction, 748

Starling's law

effects of plasma volume expansion in AMI, 106

Stenosis

left main coronary stenosis: results of coronary bypass surgery, 68

Stented fascia lata grafts

echocardiographic studies of, in mitral position, 237

Streptococcus

childhood rheumatic fever in North India, 7

Stroke index

rest and exercise hemodynamics in children with pulmonary stenosis, 1102

Stroke volume

acute effects of ethanol on LV performance, 124

functional aerobic impairment in coronary heart disease, 696

Stroke work

effect of isometric exercise on LV volume in normal man

Subaortic stenosis

ultrasound in IHSS and LV outflow obstruction, 673

Subcutaneous nodules

childhood rheumatic fever in North India, 7

Subendocardial ischemia

adequacy of myocardial oxygen delivery, 968

evaluation in valvar aortic stenosis in children, 978

in valvar and supravulvar aortic stenosis, 326

Subpulmonary ventricular septal defect

with pulmonary stenosis, 173

Subvalvular aortic stenosis

echocardiographic findings in discrete, 226, 673

Sudden death

coronary vessels and conduction system in homocystinuria, 367

natural history of ischemic heart disease in relation to arteriographic findings, 489

occluded A-V node artery, 772

prehospital ventricular fibrillation and, 790

syndrome of systolic click, murmur, and mitral valve prolapse, 717

two young soldiers, 1239

Supravulvar aortic stenosis

adequacy of myocardial oxygen delivery, 968

developmental complex including supravulvar stenosis of the aorta and pulmonary trunk, 585

echocardiographic detection, 1257

LV subendocardial ischemia, 326

Supraventricular tachycardia

electrophysiology and surgery for WPW syndrome, 799

unusual properties of accessory pathways, 1200

Surgery

aortic valve replacement

coronary perfusion vs. cold ischemic arrest during, 1190

aorto-coronary bypass

deterioration of myocardial function following bypass, 467

discrepancies between cineangiographic and postmortem findings, 703

rest and exercise potassium-43 myocardial imaging for non-invasive evaluation of, 688

treatment selection in coronary artery disease, 606

bypass

need for controlled trials, 780

cardiopulmonary bypass

coronary perfusion vs. cold ischemic arrest, 1190

myocardial blood flow and oxygen consumption after valve replacement, 933

serum, atrial, and urinary digoxin levels in children, 1047

carotid

critical lower level of cerebral blood flow, 1023

children and infants

ascending aorta to right pulmonary artery anastomosis, 952

Heart Disease in Infancy, Diagnosis and Surgical Treatment (Barratt-Boyes, Neutze, and Harris), 592

postpericardiotomy syndrome and antiheart antibodies, 301

systemic-pulmonary arterial shunts in first year, 508

complications

coronary ostial stenosis after aortic valve replacement, 530

postpericardiotomy syndrome and antiheart antibodies, 401

coronary bypass graft

natural history of ischemic heart disease, 489

nitroglycerin and coronary collateral function in patients with

coronary occlusive disease, 298

selecting patients for, 1021

and unstable angina pectoris, 196

gas endarterectomy, of right coronary artery: importance of proximal bypass graft, 63

mitral valve replacement

coarctation of the aorta with congenital mitral regurgitation, 1175

Lillehei-Kaster mitral valve prosthesis, 434

open-heart

coronary perfusion vs. cold ischemic arrest, 1190

corrected transposition of great arteries and associated ventricular rotation, 574

digoxin levels during cardiopulmonary bypass in children, 1047

postoperative conduction disturbances after ventricular septal defect and tetralogy of Fallot, 214

Peripheral Vascular Surgery: Hemodynamics of Arterial Pulsatile Blood Flow (Lee and Trainor), 1013

postinfarction ventricular septal rupture, 455

postoperative

A-V conduction in incomplete endocardial cushion defect, 631

- conduction disturbances after ventricular septal defect and tetralogy of Fallot, 214
- discrepancies between cineangiographic and postmortem findings, 702
- long-term follow-up of saphenous vein bypass surgery, 77
- pulmonary stenosis
 - rest and exercise hemodynamics in children with, 1102
- saphenous vein bypass
 - gas endarterectomy of right coronary artery: importance of proximal bypass graft, 63
 - left main coronary stenosis: results of coronary bypass surgery, 68
 - long-term follow-up, 77
 - results in a community hospital, 334
- Taussig-Bing heart with mitral valve straddling, 761
- tetralogy of Fallot
 - conduction disturbances after operation, 214
 - intracardiac repair, 958
 - systemic-pulmonary shunt surgery in infants, 508
- truncal arteriosus, 144
- valve replacement
 - myocardial blood flow and oxygen consumption after, 933
 - prevention of prosthetic aortic stenosis, 921
- Wolff-Parkinson-White syndrome, 206, 1020
- electrophysiologic approach, 799
- Survival probability**
 - posthospital phase of MI, 460
- Sympathetic nerve activity**
 - antiarrhythmic effect of chlordiazepoxide, 272
- Systemic arterial oxygen saturation**
 - surgical correction of truncus arteriosus, 144
- Systemic vascular resistance**
 - impaired LV function in alcoholic cirrhosis with ascites, 755
- Systolic click**
 - syndrome of systolic click, murmur, and mitral valve prolapse, 717
- Systolic time intervals**
 - alterations during pregnancy, 560
 - contractile response to digitalis glycosides in normal subjects, 517
 - impaired LV function in alcoholic cirrhosis with ascites, 755
 - influence of heart rate and age in children, 1107
 - thyrotoxicosis and short cardiac pre-ejection period, 900

T

- Tachyarrhythmias**
 - ventricular, permanent percutaneous atrial pacing, 222
- Tachycardia**
 - myocardial balance of inorganic phosphate and enzymes, 283
 - optimal antiarrhythmic heart rate, 654
 - perhexiline and coronary responses, 857
 - supraventricular
 - electrophysiology and surgery for WPW syndrome, 799
 - unusual properties of accessory pathways, 1200
 - ventricular, studied by electrical stimulation of the heart, 647
 - ventriculo-atrial conduction in WPW syndrome, 22
- Tachycardia-dependent block**
 - bilateral bundle branch block, 848
- Taussig-Bing Heart**
 - with mitral valve straddling, 761
- Technetium -99m**
 - quantitation of left-to-right shunts, 512
- Tension time index**
 - adequacy of subendocardial oxygen delivery, 968
 - subendocardial ischemia in severe valvar and supra-valvar aortic stenosis, 326
- Tension-velocity relationships**
 - circumferential fiber shortening and tension, 925
- Tetralogy of Fallot**
 - A-V conduction system in congenital heart disease, 1232
 - conditions simulating, 173
 - conduction disturbances after surgery, 214
 - intracardiac repair, 958
 - systemic-pulmonary shunt surgery in infants, 508
- Thrombi**
 - incorporation of radiolabelled fibrinogen into venous thrombi induced in dogs, 158
- Thromboembolism**
 - complication of coronary arteriography, 599

- Thrombosis**
 - calcific mitral stenosis, 1167
 - coronary and fatal myocardial ischemia, 1
 - and endothelial injury, 1017
 - role in AMI, 1262
 - role in development of symptom-producing atherosclerotic plaques, 1161
- Thyrotoxicosis**
 - and short cardiac pre-ejection period, 900
- Time constant**
 - contractile response to digitalis glycosides in normal subjects, 517
- Total anomalous pulmonary venous connection**
 - right atrial volume measurements, 709
- Transplantation, cardiac**
 - acute rejection in long-term survivor: clinical diagnosis, treatment and significance, 361
- Transposition of the great vessels**
 - atrial septal defect and, 1005
 - Complete Transposition of the Great Arteries* (Shaher), 1014
 - single (common) ventricle with, 994
 - tetralogy of Fallot and, 173
 - and ventricular rotation, 574
- Treadmill testing.** *See under* Exercise tests and testing
- Tricuspid aortic valve**
 - ultrasound and bicuspid aortic valve, 870
- Tricuspid atresia**
 - systemic-pulmonary shunt surgery in infants, 508
- Tricuspid valve**
 - in Ebstein's anomaly, 194, 962
 - severe congenital tricuspid incompetence in neonates, 962
- Truncus arteriosus**
 - surgical correction, 144
- Trypanosomiasis (American)**
 - Chagasic cardiopathy, 13

U

- Ultrasound**
 - apexcardiogram and LV diastolic stiffness, 441
 - assessment of LV performance in normal newborns, 232
 - bicuspid aortic valve, 870
 - congestive cardiomyopathy, 1153
 - effect of isometric exercise on LV volume in normal man, 1185
 - endocardial cushion defects, 418
 - imaging, sector scanner for real time two-dimensional echocardiography, 1147
 - inotropic agents and dyskinesia, 1038
 - left bundle branch block, 876
 - LV volume changes after amyl nitrite and nitroglycerin as measured by, 136
 - mitral valve prolapse syndrome, 428
 - in normal newborns, 1266
 - paradoxical motion of interventricular septum in LBBB, 423
 - subvalvular aortic stenosis, 226
 - See also* Echocardiography
- Uric acid**
 - cardiovascular disease in tribal societies, 1132

V

- Vagal stimulation**
 - and bradycardia during experimental acute myocardial ischemia, 943
 - and ventricular fibrillation, 1269
- Valvar aortic stenosis**
 - LV subendocardial ischemia, 326
 - ultrasound in IHSS and LV outflow obstruction, 673
- Vasodilator**
 - nitroglycerin and coronary collateral function in patients with coronary occlusive disease, 298
- Vectorcardiography**
 - criteria for diagnosis of inferior MI, 829
- Velocity of circumferential fiber shortening**
 - echocardiographic assessment of LV performance in normal newborns, 232
 - evaluation of LV performance, 925
- Velocity transducer**
 - rate of change of LV volume, 729
- Ventricles**
 - common (single)
 - A-V conduction system in congenital heart disease, 1232

- with normally related great vessels, 565
 - with transposition, 994
 - function
 - effect of isometric exercise on LV volume, 1185
 - myocardial function after bypass surgery, 467
 - Ventricular compliance**
 - wall thickness and diastolic properties of LV, 129
 - Ventricular ectopia**
 - antiarrhythmic drug therapy for ventricular ectopic arrhythmias, 659
 - rate dependent, following acute coronary occlusion, 654
 - Ventricular fibrillation**
 - effects of vagal stimulation and bradycardia during experimental acute myocardial ischemia, 943
 - optimal antiarrhythmic heart rate, 654
 - pathophysiologic observations in pre-hospital VF and sudden death, 790
 - patterns of ventricular activity during catheter defibrillation, 858
 - role of vagus nerves, 86
 - vagal stimulation and, 943, 1269
 - Ventricular premature beats**
 - antiarrhythmic drug therapy, 659
 - posthospital phase of MI: identification of patients with increased mortality risk, 460
 - Ventricular rotation**
 - corrected transposition of great arteries and, 574
 - Ventricular septal defect**
 - conduction disturbances after surgery, 214
 - echocardiographic features of endocardial cushion defects, 418
 - natural history of so-called aneurysm of membranous ventricular septum in childhood, 375
 - postinfarction ventricular septal rupture, 455
 - and pulmonary stenosis
 - conditions simulating tetralogy of Fallot, 173
 - quantitation of left-to-right shunts, 512
 - Taussig-Bing heart with mitral valve straddling, 761
 - ventricular rotation and corrected transposition of great arteries, 574
 - Ventricular tachyarrhythmias**
 - permanent pervenous atrial pacing, 222
 - Ventricular tachycardia**
 - observations as studied by electrical stimulation of heart, 647
 - optimal antiarrhythmic heart rate, 654
 - Ventriculo-atrial conduction**
 - in Wolff-Parkinson-White syndrome, 22
 - Ventriculography**
 - augmentation of LV contraction pattern in coronary artery disease by inotropic catecholamine, 1063
 - VCG criteria for diagnosis of inferior MI, 829
 - Vital capacity**
 - and congestive heart failure: Framingham study, 1160
 - pulmonary diffusing capacity in disorders of pulmonary circulation, 541
 - Volume**
 - end-diastolic volume
 - effect of isometric exercise on LV volume, 1185
 - Volume loading**
 - plasma volume prior to and following volume loading during shock with AMI, 98
 - Volume overload**
 - right atrial volume measurements from biplane cineangiography, 709
 - right ventricular
 - ultrasound and LBBB, 876
- W**
- Wall motion**
 - ECG assessment of ventricular dyssynergy, 447
 - left ventricular. *See* Left ventricle, wall motion
 - Wall thickness**
 - and diastolic properties of LV, 129
 - Wenckebach periods**
 - A-V nodal Wenckebach cycles and reentry, 197
 - and His-Purkinje conduction, 596
 - significance of second degree A-V block and BBB, 638
 - Wenckebach phenomenon**
 - bilateral bundle branch block, 848
 - intra-His bundle block, 837
 - White, Paul Dudley**
 - "An Appreciation of Paul Dudley White (1886-1973)" by Dr. J. Willis Hurst, 199
 - "James B Herrick Award Acceptance" by Dr. Allan L. Friedlich in behalf of Dr. Paul Dudley White, 203
 - "Memorial Service Remarks" by Vittorio Puddu, 205
 - Wolff-Parkinson-White syndrome**
 - anomalous LV pre-excitation (type A), 206
 - electrophysiologic approach to surgical treatment, 799
 - observations on ventricular tachycardia, 647
 - surgical correction, 206, 1020
 - ventriculo-atrial conduction in, 22
- X**
- Xanthomas**
 - coronary artery disease and type II hyperlipoproteinemia, 476
 - Xenograft**
 - coarctation of the aorta with congenital mitral regurgitation, 1175

SUPPLEMENTS
to
CIRCULATION

An Official Journal of the American Heart Association

VOLUMES 49 AND 50

January-December, 1974



AMERICAN HEART ASSOCIATION, INC.

SUPPLEMENTS to CIRCULATION

AN OFFICIAL JOURNAL OF THE AMERICAN HEART ASSOCIATION
44 East 23rd Street, New York, N. Y. 10010

EDITOR OF SUPPLEMENTS
Elliot Rapaport M.D.

Supplements to CIRCULATION will be published occasionally for binding annually in a separate volume entitled Supplements to CIRCULATION. Each supplement's page numbers will begin with page one. Supplements to CIRCULATION will be indexed separately at the end of the year.

PUBLICATIONS COMMITTEE, AMERICAN HEART ASSOCIATION

Stanford Wessler, *Chairman*
St. Louis, Mo.

William A. Bayless
New York, N. Y.

Robert M. Berne
Charlottesville, Va.

Donald C. Harrison
Stanford, Calif.

Arthur Guyton
Jackson, Miss.

William K. Hass
New York, N. Y.

Thomas M. James
Birmingham, Ala.

Thomas Killip
New York, N. Y.

Herbert J. Levine
Boston, Mass.

Richard L. Popp
Stanford, Calif.

Clark H. Millikan
Rochester, Minn.

Lucille E. Notter
New York, N. Y.

Milton C. Paige, Jr.
Boston, Mass.

Oglesby Paul
Chicago, Ill.

Eugene A. Stead, Jr.
Durham, N. C.

Arnold M. Weissler
Detroit, Mich.

Published at the Publication Office, 69 Lyme Road, Hanover, New Hampshire 03755. Second class postage paid at Hanover, New Hampshire.

Copyright © 1974, The American Heart Association, Inc., 44 East Twenty-third Street, New York, N. Y. 10010

SUPPLEMENTS

to

CIRCULATION

VOLUMES 49 AND 50

January-December, 1974

SURGICAL TREATMENT OF HYPERLIPIDEMIA

No. 1 (May)

I	Apologia	I-1
II	The Laboratory Experience	I-13
III	Clinical Status of the Partial Iliac Bypass Operation	I-22

CARDIOVASCULAR SURGERY 1973

No. 2 (August)

Foreword		
John Hines Kennedy		II-1
Cardiac Performance Early After Interatrial Transposition of Venous Return in Infants and Small Children		
Grant V.S. Parr, Eugene H. Blackstone, John W. Kirklin, Albert D. Pacifico, and Poul Lauridsen		II-2
Recent Results of Two-Stage Surgical Treatment of Large Ventricular Septal Defect		
Donald A. Girod, Roger A. Hurwitz, Harold King, and Walter Jolly		II-9
Is Pulmonary Artery Banding for Ventricular Septal Defects Obsolete?		
Eva Griepp, James W. French, Norman E. Shumway, and David Baum		II-14
Surgical Treatment of Common Arterial Trunk with Pseudotruncus Arteriosus		
Albert D. Pacifico, John W. Kirklin, L. M. Barger, Jr., and Benigno Soto		II-20
Systolic Hypertension During Submaximal Exercise After Correction of Coarctation of Aorta		
Frederick W. James and Samuel Kaplan		II-27

(Continued)

S-III

Atrial Septectomy in Patients with D-Transposition of the Great Arteries, Ventricular Septal Defect, and Severe Pulmonary Vascular Obstructive Disease Annon Rosenthal, Michael D. Freed, S. Bert Litwin and William F. Bernhard	11-35
Preoperative and Postoperative Right Ventricular Function in Children with Transposition of the Great Vessels Jay M. M. Jarmakani, and Ramon V. Canent, Jr.	11-39
Long-term Follow-up of Mustard Operation Survivors Douglas D. Mair, Gordon K. Danielson, Robert B. Wallace, and Dwight C. McGoon	11-46
Intellectual Development of Children Subjected to Prolonged Circulatory Arrest During Hypothermic Open Heart Surgery in Infancy Geoffrey Stevenson, E. Franklin Stone, David H. Dillard, and Beverly C. Morgan	11-54
Central Nervous System Consequences in Infants of Cardiac Surgery Using Deep Hypothermia and Circulatory Arrest James A. Brunberg, Edward L. Reilly, and Donald B. Doty ...	11-60
Increase in Right Ventricular Volume Following Valvulotomy for Pulmonary Atresia or Stenosis with Intact Ventricular Septum T. P. Graham, Jr., H. W. Bender, G. F. Atwood, D. L. Page and C. G. R. Sell	11-69
Changes in the Underlying Coronary Circulation Secondary to Bypass Grafting Ephraim Glassman, Frank C. Spencer, Kenneth R. Krauss, Barbara Weisinger, and O. Wayne Isom	11-80
Vein Graft Occlusion: Immediate and Late Consequences and Therapeutic Implications Lawrence I. Bonchek, Shahbudin H. Rahimtoola, Bernard R. Chaitman, Josef Rosch, Richard P. Anderson and Albert Starr	11-84
Natural History of Coronary Disease in Patients with and Without Coronary Bypass Graft Surgery Goffredo G. Gensini, Paolo Esente, and Ann Kelly	11-98
Left Ventricular Performance During Exercise Before and One Year After Aortocoronary Bypass Surgery for Angina Pectoris Lucien Campeau, Ghanem Elias, Enrique Esplugas, Jacques Lesperance, Martial G. Bourassa, and Claude M. Grondin	11-103
Predictors of Surgical Mortality in Patients Undergoing Direct Myocardial Revascularization K. E. Hammermeister and J. Ward Kennedy	11-112
Coronary Revascularization in Patients Receiving Propranolol John M. Moran, Jaime Mulet, Jose M. Caralps and Roque Pifarre	11-116
Retrograde and Antegrade Pressures and Flows in Preinfarction Syndrome Frederick B. Parker, Jr., John F. Neville, Jr., E. Lawrence Hanson and Watts R. Webb	11-122
Regression and Appearance of Coronary Collaterals in Humans During Life Martial G. Bourassa, Alain Solingnac, Claude Goulst and Jacques Lesperance	11-127

(Continued)

Left Main Coronary Artery Lesions: Risks of Catheterization; Exercise Testing and Surgery	
Fareed-uddin Khaja, Sukh Dev Sharma, Robert M. Easley, Jr., Robert A. Heinle, and Sidney Goldstein	II-136
Analysis of Intraoperative Coronary Angiography in Aorto-coronary Bypass Grafts	
Martin J. Kaplitt, Stephen L. Frantz, Arthur R. Bell, Jr., Harry L. Stein, and Stephen J. Gulotta	II-141
Experience with Sixty Consecutive Ventricular Aneurysm Resections	
Gopal Rao, Emir A. Zikria, William H. Miller, Siroos R. Samadani and William B. Ford	II-149
Factors Influencing Long-Term Survival After Isolated Aortic Valve Replacement	
O. Wayne Ison, Judith M. Dembrow, Ephraim Glassman, Bernard S. Pasternack, Jay P. Sackler, and Frank C. Spencer	II-154
Comparison of Three Devices to Replace the Aortic Valve	
Robert B. Karp, John W. Kirklin, Nicholas T. Kouchoukos, and Albert D. Pacifico	II-163
Conduction Defects After Cardiac Surgery	
Jonathan D. Satinsky, John J. Collins, Jr., and James E. Dalen	II-170
Effect of Intracoronary Tetrodotoxin on Recovery of the Isolated Working Rat Heart from Sixty Minutes of Ischemia	
G. Frank O. Tyers, G. J. Todd, I. M. Niebauer, N. J. Manley, and J. A. Waldhausen	II-175
Anterior-Superior Displacement of Papillary Muscles Producing Obstruction and Mitral Regurgitation in Idiopathic Hypertrophic Subaortic Stenosis: Operative Relief by Posterior-Superior Realignment of Papillary Muscles Following Ventricular Septal Myectomy	
Robert L. Reis, Merle R. Bolton, James F. King, David M. Pugh, Marvin I. Dunn, and Dean T. Mason	II-181
Long-Term Results of Mitral Annuloplasty in Children with Rheumatic Mitral Regurgitation	
George E. Reed, Howard H. Kloth, Brian Kiely, Delores A. Danilowicz, Bertha Rader, and Eugenie F. Doyle	II-189
Effect of Mitral Commissurotomy on Right-Heart Work	
Benson R. Wilcox, Norman A. Coulter, Jr., Carol L. Lucas, Gordon F. Murray, and Peter J. K. Starek	II-193
Transventricular Mitral Valvulotomy: Analysis of Factors Influencing Operative and Late Results	
R. Nathan Grantham, Willard M. Daggett, A. Benedict Cosimi, Mortimer J. Buckley, Eldred D. Mundth, M. Terry McEnany, J. Gordon Scannell and W. Gerald Austen	II-200
Experimental and Clinical Use of an Automated Perfusion System and a Membrane Oxygenator	
Richard E. Clark, Thomas B. Ferguson, Ronald W. Hagen, Phillip S. Berger, and Clarence S. Weldon	II-213
Role of Platelet Aggregation in Prolonged Extracorporeal Respiratory Support	
James N. Ross, Jr., Clarence H. Brown, III, Margie K. Harness, S. Donald Greenberg, Martha M. Tacker, and John H. Kennedy	II-219

(Continued)

Emergency Pulmonary Embolectomy for Massive Pulmonary Embolism	
George J. Reul and Arthur C. Beall, Jr.	II-236
Delayed Evolution of Myocardial Ischemic Injury After Intra-aortic Balloon Counterpulsation	
Giacomo A. DeLaria, Kaj H. Johansen, Burton E. Sobel, Harley D. Sybers and Eugene F. Bernstein	II-242
Temporal Changes in Collateral Coronary Blood Flow in Ischemic Myocardium During Intra-aortic Balloon Pumping	
John T. Watson, James T. Willerson, David E. Fixler, and Winifred L. Sugg	II-249
Effects of External Counterpulsation on Myocardial Ischemia Induced by Atrial Pacing	
Henry S. Loeb, Mushtaq Khan, William Towne, and Rolf Gunnar	II-255
Measurement of Systolic Femoral Arterial Pressure During Reactive Hyperemia: An Estimate of Aortoiliac Disease	
Bruce J. Brenner, Jeffrey K. Rained, R. Clement Darling, and W. Gerald Austen	II-259
Pericardiectomy for Treatment of Uremic Pericarditis	
Taylor M. Wray, James Humphreys, James M. Perry, William J. Stone, and Harvey W. Bender, Jr.	II-268
Experimental Comparison of a New Intracaval Filter with the Mobin-Uddin Umbrella Device	
Phillip P. Brown, Marvin D. Peyton, Ronald C. Elkins, and Lazar J. Greenfield	II-272

Abstracts for the 47th Scientific Sessions,

Scientific Sessions for Nurses,

28th Annual Meeting,

Council on Arteriosclerosis — American Society for the Study of Arteriosclerosis

National Conference on Thrombosis and Hemostasis

No. 3 (October)

SUPPLEMENTS TO CIRCULATION

VOLUMES 49 and 50

JANUARY-DECEMBER, 1974

Index to ABSTRACTS, AHA 47th Scientific Sessions, Supplement III, October 1974 is included in that issue.

AUTHOR INDEX

A

Anderson, R.P., II-84
Atwood, G.F., II-69
Austen, W.G., II-200, II-259

B

Barger, L.M., Jr., II-20
Baum, D., II-14
Beall, A.C., Jr., II-236
Beil, A.R., Jr., II-141
Bender, H.W., Jr., II-69, II-268
Berger, P.S., II-213
Bernhard, W.F., II-35
Bernstein, E.F., II-242
Blackstone, E.H., II-2
Bolton, M.R., II-181
Bonchek, L.I., II-84
Bourassa, M.C., II-103, II-127
Brener, B.J., II-259
Brown, C.H., III, II-219
Brown, P.P., II-272
Brunberg, J.A., II-60
Buchwald, H., I-1
Buckley, M.J., II-200

C

Campeau, L., II-103
Canent, R.V., Jr., II-39
Caralps, J.M., II-116
Chaitman, B.R., II-84
Clark, R.E., II-213
Collins, J.J., Jr., II-170
Cosimi, A.B., II-200
Coulter, N.A., Jr., II-193

D

Daggett, W.M., II-200
Dalen, J.E., II-170
Danielson, G.K., II-46
Danilowicz, D.A., II-189
Darling, R.C., II-259
DeLaria, G.A., II-242
Dembrow, J.M., II-154
Dillard, D.H., II-54
Doty, D.B., II-60
Doyle, E.F., II-189
Dunn, M.I., II-181

E

Easley, R.M., Jr., II-136
Elias, G., II-103
Elkins, R.C., II-272
Esente, P., II-98
Esplugas, E., II-103

F

Ferguson, T.B., II-213
Fixler, D.E., II-249
Ford, W.B., II-149
Frantz, S.L., II-141
Freed, M.D., II-35
French, J.W., II-14

G

Gensini, G.G., II-98
Girod, D.A., II-9
Glassman, E., II-80, II-154
Goldstein, S., II-136
Goulet, C., II-127
Graham, T.P., Jr., II-69
Griep, E., II-14
Grantham, R.N., II-200
Greenberg, S.D., II-219
Greenfield, L.J., II-272
Grondin, C.M., II-103
Gulotta, S.J., II-141
Gunnar, R.M., II-255

H

Hagen, R.W., II-213
Hammermeister, K.E., II-112
Hanson, E.L., II-122
Harness, M.K., II-219
Heinle, R.A., II-136
Humphreys, J., II-268
Hurwitz, R.A., II-9

I

Isom, O.W., II-80, II-154

J

James, F.W., II-27

Jarmakani, J.M.M., II-39
Johansen, K.H., II-242
Jolly, W., II-9

K

Kaplan, S., II-27
Kaplitt, M.J., II-141
Karp, R.B., II-163
Kelly, A., II-98
Kennedy, J.H., II-1, II-219
Kennedy, J.W., II-112
Khaja, F., II-136
Khan, M., II-255
Kiely, B., II-189
King, H., II-9
King, J.F., II-181
Kirklin, J.W., II-2, II-20, II-163
Kloth, H.H., II-189
Kouchoukos, N.T., II-163
Krauss, K.R., II-80

L

Lauridsen, P., II-2
Lespérance, J., II-103, II-127
Litwin, S.B., II-35
Loeb, H.S., II-255
Lucas, C.L., II-193

M

McEnany, M.T., II-200
McGoan, D.C., II-46
Mair, D.D., II-46
Manley, N.J., II-175
Mason, D.T., II-181
Miller, W.H., II-149
Moore, R.B., I-1
Moran, J.M., II-116
Morgan, B.C., II-54
Mulet, J., II-116
Mundth, E.D., II-200
Murray, G.F., II-193

N

Neville, J.F., Jr., II-122
Niebauer, I.M., II-175

S-VIII P

Page, D.L., II-69
Pacifico, A.D., II-2, II-20, II-163
Parker, F.B., Jr., II-122
Parr, G.V.S., II-2
Pasternack, B.S., II-154
Perry, J.M., II-268
Peyton, M.D., II-272
Pifarre, R., II-116
Pugh, D.M., II-181

R

Rader, B., II-189
Rahimtoola, S.H., II-84
Raines, J.K., II-259
Rao, G., II-149
Reed, G.E., II-189
Reilly, E.L., II-60
Reis, R.L., II-181
Reul, G.J., II-236
Rosch, J., II-84
Rosenthal, A., II-35
Ross, J.N., Jr., II-219

S

Sackler, J.P., II-154
Samadani, S.R., II-149
Satinsky, J.D., II-170
Seannell, J.G., II-200
Sell, C.G.R., II-69
Sharma, S.D., II-136
Shumway, N.E., II-14
Sobel, B.E., II-242
Solignac, A., II-127
Soto, B., II-20
Spencer, F.C., II-80, II-154
Starek, P.J.K., II-193
Starr, A., II-84
Stein, H.L., II-141
Stevenson, J.G., II-54
Stone, E.F., II-54
Stone, W.J., II-268
Sugg, W.L., II-249
Sybers, H.D., II-242

T

Tacker, M.M., II-219
Todd, G.J., II-175
Towne, W., II-255
Tyers, G.F.O., II-175

V

Varco, R.L., I-1

W

Waldhausen, J.A., II-175
Wallace, R.B., II-46
Watson, J.T., II-249
Webb, W.R., II-122
Weisinger, B., II-80
Weldon, C.S., II-213
Wilcox, B.R., II-193
Willerson, J.T., II-249
Wray, T.M., II-268

Z

Zikria, E.A., II-149

SUPPLEMENTS TO CIRCULATION

VOLUMES 49 AND 50

JANUARY-DECEMBER, 1974

Index to ABSTRACTS, AHA 47th Scientific Sessions, Supplement III, October 1974 is included in that issue.

SUPPLEMENT SUBJECT INDEX

A

- Adenosine triphosphate (ATP)**
 - delayed evolution of myocardial ischemic injury after intra-aortic balloon counterpulsation, II-242
- Aneurysms**
 - ventricular resection for, II-149
- Angina pectoris**
 - coronary revascularization in patients receiving propranolol, II-116
 - effects of external counterpulsation on myocardial ischemia induced by atrial pacing, II-255
 - left main coronary artery lesions, II-136
 - preinfarction
 - analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141
 - coronary revascularization in patients receiving propranolol, II-116
 - retrograde and antegrade pressures and flow, II-122
 - ventricular aneurysm resections, II-149
- Angiocardiography**
 - predictors of surgical mortality in myocardial revascularization, II-112
- Angiography**
 - analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141
 - assessment before operation for IHSS, II-181
 - classification of angiograms, II-141
 - left main coronary artery lesions, II-136
- Animals**
 - dogs
 - automated perfusion system and membrane oxygenator, II-213
 - delayed evolution of myocardial ischemic injury after IABC, II-242
 - temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249
 - rats
 - effect of tetrodotoxin on recovery of isolated working rat heart from sixty minutes of ischemia, II-175
- Annuloplasty, mitral**
 - in children with rheumatic mitral regurgitation, II-189
- Anticoagulation**
 - comparison of three devices to replace aortic valve, II-163
 - factors influencing long-term survival after aortic valve replacement, II-154
- Aortic counterpulsation.** *See* Intra-aortic balloon pumping
- Aortic cross-clamp**
 - effect of tetrodotoxin on recovery of isolated working rat heart from sixty minutes of ischemia, II-175
- Aortic insufficiency**
 - comparison of three devices to replace aortic valves, II-163
- Aortic valves**
 - replacement
 - comparison of Braunwald-Cutter, Starr-Edwards prostheses and homografts, II-163
- Aortocoronary saphenous vein bypass surgery**
 - for angina pectoris, II-103
 - regression and appearance of coronary collaterals, II-127
- Aortoiliac disease**
 - measurement of systolic femoral arterial pressure during reactive hyperemia, II-259
- Arrhythmias**
 - ventricular aneurysm resections, II-149
- Arterial pressure**
 - measurement of systolic femoral arterial pressure during reactive hyperemia, II-259

- Arteriography**
 - emergency pulmonary embolectomy for massive pulmonary embolism, II-236
- Asymmetrical annuloplasty**
 - long-term results of mitral annuloplasty in children with rheumatic mitral regurgitation, II-189
- Asymmetrical septal hypertrophy**
 - surgical treatment of IHSS, II-181
- Atherosclerosis**
 - surgical treatment of hyperlipidemia, I-1
 - vein graft occlusion, II-84
- Atrial function**
 - early postoperative course after interatrial transposition of venous return, II-2
- Atrial pacing**
 - effects of external counterpulsation on myocardial ischemia induced by atrial pacing, II-255
- Atrial septal defect**
 - pulmonary artery banding, II-14
- Atrial septectomy**
 - in D-transposition of great arteries, VSD, and severe pulmonary vascular obstructive disease, II-35
- Atrioventricular block**
 - conduction defects after cardiac surgery, II-170

B

- Balloon pumping.** *See* Intra-aortic balloon pumping
- Beta adrenergic blockade**
 - coronary revascularization in patients receiving propranolol, II-116
- Blood flow**
 - preoperative and postoperative RV function in children with TGV, II-39
 - retrograde and antegrade pressures and flows in preinfarction angina, II-122
- Blood pressure**
 - measurement of systolic femoral arterial pressure during reactive hyperemia, II-259
 - retrograde and antegrade pressures and flows in preinfarction syndrome, II-122
 - systolic hypertension during exercise after correction of coarctation of aorta, II-27
- Braunwald-Cutter prosthesis**
 - comparison with Starr-Edwards prosthesis and aortic valve homografts, II-163
- Bundle branch block**
 - conduction defects after cardiac surgery, II-170
- Bypass graft surgery**
 - for angina pectoris
 - LV performance during exercise before and after, II-103
 - aortocoronary saphenous vein bypass graft, II-84
 - analysis of intraoperative coronary angiography in, II-141
 - changes in underlying coronary circulation secondary to bypass grafting, II-80
 - continuous cardiopulmonary bypass, II-60
 - coronary
 - benefit-to-risk ratio, II-98
 - left main coronary artery lesions, II-136
 - retrograde and antegrade pressures and flows in preinfarction syndrome, II-122
 - vein graft occlusion, II-84

C

- Cardiac arrest**
 - effect of tetrodotoxin on recovery of isolated working rat heart from sixty minutes of ischemia, II-175
 - emergency pulmonary embolectomy for massive pulmonary embolism, II-236
- Cardiac index**
 - transventricular mitral valvulotomy, II-200
- Cardiac output**
 - early postoperative course after interatrial transposition of venous return in infants and children, II-2
- Cardiac tamponade**
 - pericardiectomy for treatment of uremic pericarditis, II-268
- Cardiopulmonary bypass**
 - continuous technique, II-60
 - experience with sixty consecutive ventricular aneurysm resections, II-149
 - neurological defects following cardiac surgery using deep hypothermia and circulatory arrest, II-60
- Cardiothoracic ratio**
 - preoperative, II-154
- Children and infants**
 - intellectual development of children subjected to hypothermia during open-heart surgery in infancy, II-54
 - interatrial transposition of venous return, II-2
 - mitral annuloplasty for rheumatic mitral regurgitation, II-189
 - neurological injuries resulting from cardiac surgery using deep hypothermia and circulatory arrest, II-60
 - pulmonary artery banding
 - for ventricular septal defect, II-9, II-14
 - transposition of great vessels
 - preoperative and postoperative RV function, II-39
 - ventricular septal defect
 - two-stage surgical treatment, II-9
- Cholesterol**
 - enterohepatic cholesterol and bile acid mechanisms, I-15
 - surgical treatment of hyperlipidemia, I-1
- Cholestyramine**
 - cholesterol lowering action, I-1
- Circulatory arrest**
 - neurological injuries in infants after cardiac surgery using deep hypothermia and circulatory arrest, II-60
- Circulatory assistance**
 - delayed evolution of myocardial ischemic injury after IABC, II-242
- Classification systems**
 - intraoperative coronary angiograms, II-141
- Clofibrate**
 - cholesterol lowering action, I-1
- Coarctation of aorta**
 - systolic hypertension during exercise after correction of, II-27
- Collateral circulation**
 - intercoronary, II-80
 - regression and appearance in humans during life, II-127
 - retrograde and antegrade pressures and flows in preinfarction syndrome, II-122
- Collateral coronary blood flow**
 - temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249
- Common arterial trunk malformations**
 - surgical treatment of pseudotruncus arteriosus and, II-20
- Computer analysis**
 - effect of mitral commissurotomy on right-heart work, II-193
- Conduction defects**
 - after cardiac surgery, II-170
- Congenital heart disease**
 - coarctation of aorta
 - systolic hypertension during exercise after correction of, II-27
 - intellectual development of children subjected to circulatory arrest during hypothermia in infancy, II-54
 - transposition of great vessels
 - preoperative and postoperative RV function in children with TGV, II-39
- Coronary arteries**
 - acute insufficiency
 - temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249
 - changes in underlying coronary circulation secondary to bypass grafting, II-80
 - left main coronary artery lesions; risks of catheterization, exercise

- testing and surgery, II-136
- obstructions, II-80
 - regression and appearance of coronary collaterals in humans during life, II-127
 - retrograde and antegrade pressures and flows in preinfarction syndrome, II-122
- occlusion
 - delayed evolution of myocardial ischemic injury after intra-aortic balloon counterpulsation, II-242
 - progress of coronary artery disease with and without bypass graft surgery, II-98
 - progression of obstruction, II-80
 - proximal stenosis, II-80
 - regression and appearance of coronary collaterals in humans during life, II-127
- surgery
 - predictors of surgical mortality in myocardial revascularization, II-112
 - vein graft occlusions, II-84
- Coronary arteriography**
 - preinfarction syndrome, II-122
 - progression of coronary artery disease with and without bypass graft surgery, II-98
- Coronary artery disease**
 - LV performance during exercise before and after aortocoronary bypass surgery for angina, II-103
 - natural history in patients with and without coronary bypass graft surgery, II-98
 - predictors of surgical mortality in myocardial revascularization, II-112
- Coronary blood flow**
 - temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249
- Coronary sinus flow**
 - effects of external counterpulsations on myocardial ischemia induced by atrial pacing, II-255
- Counterpulsation**
 - effects of external counterpulsation on myocardial ischemia induced by atrial pacing, II-255
- Creatine phosphokinase (CPK)**
 - delayed evolution of myocardial ischemic injury after IABC, II-242
- Cyproheptadine**
 - platelet aggregation in prolonged extracorporeal respiratory support, II-219

D

- Dextrothyroxine**
 - mode of action, I-1
- Diastolic murmur**
 - comparison of three devices to replace aortic valve, II-163
- Diets**
 - lipid influencing, I-1
- Drugs**
 - lipid influencing, I-1

E

- Electrocardiography**
 - systolic hypertension during exercise after correction of coarctation of aorta, II-27
- Electroencephalography**
 - neurological injuries following cardiac surgery using deep hypothermia and circulatory arrest, II-60
- Electromagnetic flow studies**
 - analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141
- Electron microscopy**
 - platelet aggregation in prolonged extracorporeal respiratory support, II-219
- Embolism**
 - comparison of new intracaval filter with Mobin-Uddin umbrella device, II-272
 - emergency pulmonary embolectomy for massive pulmonary embolism, II-236
 - platelet aggregation in prolonged extracorporeal respiratory support, II-219
 - transventricular mitral valvulotomy, II-200
- Exercise**
 - LV performance during exercise before and after aortocoronary bypass surgery for angina pectoris, II-103

- systolic hypertension during submaximal exercise after correction of coarctation of aorta, II-27
- Extracorporeal respiratory support**
- role of platelet aggregation in prolonged, II-219

F

- Femoral artery**
- measurement of systolic femoral arterial pressure during reactive hyperemia, II-259

G

- Graft patency**
- changes in underlying coronary circulation secondary to bypass grafting, II-80
- L.V. performance during exercise before and one year after aortocoronary bypass surgery for angina, II-103
- regression and appearance of coronary collaterals, II-127
- vein graft occlusion, II-84

H

- Heart failure**
- L.V. performance during exercise before and after aortocoronary bypass surgery for angina, II-103
- Hemodialysis**
- pericardiectomy for treatment of uremic pericarditis, II-268
- Hydraulic energy dissipation**
- effect of mitral commissurotomy on right-heart work, II-193
- Hyperemia**
- measurement of systolic femoral arterial pressure during reactive hyperemia, II-259
- Hyperlipidemia**
- surgical treatment, I-1
- Hypertension**
- pulmonary
- atrial septectomy in TGA with VSD and severe pulmonary vascular obstructive disease, II-35
- systolic hypertension during submaximal exercise after correction of coarctation of aorta, II-27
- transventricular mitral valvulotomy, II-200
- Hypoplastic right ventricle**
- increase in RV volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69
- Hypothermia**
- intellectual development of children subjected to prolonged circulatory arrest during, II-54
- neurological injuries in infants after cardiac surgery using deep hypothermia and circulatory arrest, II-60
- Hypoxemia**
- atrial septectomy for TGA with VSD and pulmonary vascular obstructive disease, II-35

I

- Idiopathic hypertrophic subaortic stenosis**
- anterior-superior displacement of papillary muscle producing obstruction and mitral regurgitation, II-181
- Impedance matching**
- effect of mitral commissurotomy on right-heart work, II-193
- Intellectual development**
- of children subjected to prolonged circulatory arrest during open-heart surgery, II-54
- Interatrial transposition of venous return**
- early postoperative course in infant and child, II-2
- Intra-aortic balloon counterpulsation**
- delayed evolution of myocardial ischemic injury after IABC, II-242
- Intra-aortic balloon pumping**
- temporal changes in collateral coronary blood flow in ischemic myocardium during, II-249
- Intracaval filter**
- comparison of Mobin-Uddin umbrella device, II-272
- Ischemia**
- effect of tetrodotoxin on recovery of isolated working rat heart from sixty minutes of ischemia, II-175
- effects of external counterpulsation on myocardial ischemia induced by atrial pacing, II-255
- systolic hypertension during exercise after correction of coarctation of aorta, II-27
- temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249

I

- Left anterior hemiblock**
- conduction defects after cardiac surgery, II-170
- Left bundle branch block**
- conduction defects after cardiac surgery, II-170
- Left main coronary artery lesions**
- risks of catheterization, exercise testing and surgery, II-136
- Left ventricular function**
- during exercise before and after aortocoronary bypass surgery for angina, II-103
- outflow obstruction; surgical treatment of IHSS, II-181
- after vein graft occlusion, II-84

M

- Membrane oxygenator**
- experimental and clinical use of automated perfusion system and, II-213
- platelet aggregation in prolonged extracorporeal respiratory support, II-219
- Mitral annuloplasty**
- long-term results in children with rheumatic mitral regurgitation, II-189
- Mitral commissurotomy**
- effect on right-heart work, II-193
- open vs. closed, II-200
- Mitral regurgitation**
- long-term results of mitral annuloplasty in children with rheumatic mitral regurgitation, II-189
- surgical treatment of IHSS, II-181
- transventricular mitral valvulotomy, II-200
- Mitral stenosis**
- effect of mitral commissurotomy on right-heart work, II-193
- transventricular mitral valvulotomy: analysis of operative and late results, II-200
- Mitral valve**
- calcification, II-200
- Mobin-Uddin umbrella device**
- experimental comparison of new intracaval filter with, II-272
- Mortality**
- factors influencing long-term survival after aortic valve replacement, II-154
- predictors in myocardial revascularization, II-112
- Mustard's procedure**
- early postoperative course in infants and children, II-2
- preoperative and postoperative RV function in children with TGV, II-39
- Myocardial infarction**
- delayed evolution of myocardial ischemic injury after intra-aortic balloon counterpulsation, II-242
- L.V. performance during exercise before and after aortocoronary bypass surgery for angina, II-103
- postoperative
- regression and appearance of coronary collaterals, II-127
- ventricular aneurysm resections, II-149
- Myocardium**
- revascularization
- predictors of surgical mortality in patients undergoing, II-112
- progress of coronary artery disease with and without bypass graft surgery, II-98
- regression and appearance of coronary collaterals, II-127
- ventricular aneurysm resections, II-149

N

- Nervous system**
- central nervous system consequences in infants having surgery using deep hypothermia and circulatory arrest, II-60
- Nicotinic acid**
- cholesterol lowering effect, I-1

O

- Obstructive cardiomyopathy**
- surgical treatment of IHSS, II-181
- Occlusions**
- vein graft, II-84

Open-heart surgery

intellectual development of children subjected to hypothermia in infancy, II-54

Oxygenators, membrane

automated perfusion system and membrane oxygenators, II-213
platelet aggregation in prolonged extracorporeal respiratory support, II-219

P**Partial ileal bypass**

changes in angina pectoris, I-33
changes in xanthomatous lesions, I-33
cholesterol absorption and excretion, I-28
cholesterol pool size estimation and turnover rate, I-30
cholesterol synthesis studies, I-29
clinical status of operation, I-22
effect on circulating cholesterol concentration, I-22
effect on circulating triglyceride concentration, I-26
effect on serum lipoproteins, I-28
ECG, VCG and exercise ECG changes, I-33
laboratory experiments, I-13
long-range mortality, I-34
operative mortality and morbidity, I-30
operative technique, I-22
in pediatric population, I-34
radiographic appraisal, I-33
side effects, I-30
surgical treatment of hyperlipidemia, I-1

Patent ductus arteriosus

pulmonary artery banding, II-14

Patients

selection of. *See* Selection of patients

Perfusion methods

ventricular aneurysm resections, II-149

Perfusion system

automated perfusion system and membrane oxygenators, II-213

Pericardiectomy

for treatment of uremic pericarditis, II-268

Pericarditis

pericardiectomy for treatment of uremic pericarditis, II-268

Platelets

platelet aggregation in prolonged extracorporeal respiratory support, II-219

Preinfarction angina

analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141
coronary revascularization in patients receiving propranolol, II-116

Preinfarction syndrome

retrograde and antegrade pressures and flow, II-122

Propranolol

coronary revascularization in patients receiving, II-116

Prostheses

aortic valve replacement
comparison of Braunwald-Cutter, Starr-Edwards prostheses and homografts, II-163
factors influencing long-term survival after, II-154

Pseudotruncus arteriosus

surgical treatment of common arterial trunk with, II-20

Pulmonary arteriolar resistance

transventricular mitral valvulotomy, II-200

Pulmonary artery banding

atrial septal defect, II-14
results of two-stage surgical treatment of large VSD, II-9, II-14

Pulmonary atresia

increase in RV volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69
with VSD, II-20

Pulmonary congestion

transventricular mitral valvulotomy, II-200

Pulmonary embolism

comparison of new intracaval filter with Mobin-Uddin umbrella device, II-272
emergency pulmonary embolectomy for massive pulmonary embolism, II-236
platelet aggregation in prolonged extracorporeal respiratory support, II-219

Pulmonary hemodynamics

effect of mitral commissurotomy on right-heart work, II-193

Pulmonary stenosis

increase in RV volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69

Pulmonary vascular impedance

effect of mitral commissurotomy on right-heart work, II-193

Pulmonary vascular obstructive disease

atrial septectomy for TGA, VSD and, II-35

Pulmonary vascular resistance

effect of mitral commissurotomy on right-heart work, II-193

Pumps in perfusion circuits

automated perfusion system and membrane oxygenator, II-213
platelet aggregation in prolonged extracorporeal respiratory support, II-219

R**Radioactive microspheres**

temporal changes in ischemic myocardium during intra-aortic balloon pumping, II-249

Respiratory support

role of platelet aggregation in prolonged extracorporeal respiratory support, II-219

Restenosis

transventricular mitral valvulotomy, II-200

Right bundle branch block

conduction defects after cardiac surgery, II-170

Right-heart work

effect of mitral commissurotomy on, II-193

Right ventricle

increased volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69
preoperative and postoperative function in children with TGV, II-39

S**Saphenous vein bypass grafts, II-103**

vein graft occlusion, II-84

Selection of patients

analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141
predictors of surgical mortality in myocardial revascularization, II-112
for pulmonary artery banding for VSD, II-14

ST segment

delayed evolution of myocardial ischemic injury after IABC, II-242

Starr-Edwards prosthesis

comparison with Braunwald-Cutter prosthesis and aortic valve homografts, II-163
factors influencing long-term survival after prosthetic replacement of aortic valves, II-154

Surgery

aneurysmectomy

ventricular aneurysm resections, II-149

aortic valve replacement

comparison of Braunwald-Cutter, Starr-Edwards prostheses and homografts, II-163

factors influencing long-term survival after, II-154

aortocoronary bypass grafts

analysis of intraoperative coronary angiography in, II-141
coronary revascularization in patients receiving propranolol, II-116

left main coronary artery lesions, II-136

aortocoronary saphenous vein bypass

LV performance during exercise before and after, II-103

bypass graft surgery

vein graft occlusion, II-84

See also Bypass graft surgery

cardiopulmonary bypass

emergency pulmonary embolectomy for massive pulmonary embolism, II-236

children and infants

neurological injuries following deep hypothermia and circulatory arrest, II-60

conduction defects after, II-170

myocardial revascularization

in patients receiving propranolol, II-116

predictors of mortality, II-112

- regression and appearance of coronary collaterals, II-127
- ventricular aneurysm resections, II-149
- open-heart
 - intellectual development of children subjected to hypothermia during, II-54
- pulmonary embolectomy for massive pulmonary embolism, II-236
- transventricular mitral valvulotomy: factors influencing operative and late results, II-200

Survival rates

- factors influencing long-term survival after aortic valve replacement, II-154

T**Tetrodotoxin**

- effect on recovery of isolated working rat heart from sixty minutes of ischemia, II-175

Thrombocytopenia

- platelet aggregation in prolonged extracorporeal respiratory support, II-219

Thromboembolism

- comparison of new intracaval filter with Mobin-Uddin umbrella device, II-272
- comparison of three devices to replace aortic valve, II-193
- factors influencing long-term survival after aortic valve replacement, II-154

Transposition of great arteries

- atrial septectomy for TGA with VSD and severe pulmonary vascular obstructive disease, II-35
- early postoperative course after interatrial transposition of venous return in infants and children, II-2
- preoperative and postoperative RV function in children with TGV, II-39

Transventricular mitral valvulotomy

- closed vs. open, II-200

Tricuspid regurgitation

- increase in RV volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69

U**Uremic pericarditis**

- pericardiectomy for treatment of, II-268

V**Valved synthetic conduits**

- surgical treatment of common arterial trunk and pseudotruncus arteriosus, II-20

Valvulotomy

- increase in RV volume following, for pulmonary atresia or stenosis with intact ventricular septum, II-69
- transventricular mitral, II-200

Vena caval filtration

- comparison of new intracaval filter with Mobin-Uddin umbrella device, II-272

Ventricles

- increase in RV volume following valvulotomy for pulmonary atresia or stenosis with intact ventricular septum, II-69
- left. *See* Left ventricle
- right. *See* Right ventricle

Ventricular septal defect

- atrial septectomy for TGA with VSD and severe pulmonary vascular obstructive disease, II-35
- pulmonary artery banding, II-9, II-14
- pulmonary atresia and, II-20
- surgical treatment
 - common arterial trunk and pseudotruncus arteriosus, II-20
 - two-stage surgical treatment of large VSD as alternative to primary closure, II-9, II-14

Ventriculography

- for resection of LV aneurysm, II-149

X**X-rays**

- analysis of intraoperative coronary angiography in aortocoronary bypass grafts, II-141



